```
Set      Items    Description
S1       18966    TARGET? OR OBJECT? OR GOAL? OR DESTINATION?
S2       45658    DEVICE? OR CLIENT? OR NODE? OR  TERMINAL OR PROCESSOR? OR -
                  MICROPROCESSOR? OR COMPUTER? OR MICROCOMPUTER? OR UNIT? OR IN-
                  STRUMENT?
S3        1731    (WIRELESS OR WIRE()LESS OR MOBILE OR PORTABLE OR CELLULAR -
                  OR CELL OR IN()RANGE OR INRANGE)(2N)(DEVICE? OR CLIENT? OR NO-
                  DE? OR COMPUTER? OR TERMINAL)
S4       10581    STORE OR STORING OR SAVE OR SAVING OR KEEP OR KEEPING OR P-
                  RESERV?
S5       27443    PART? OR BLOCK? OR CHUNK? OR SEGMENT? OR PIECE?
S6       24084    VERSION? OR EDITION? OR RELEASE?
S7       62274    FILE? OR DATA OR INFORMATION OR RECORD?
S8       23486    COMMUNICAT? OR TRANSMIT? OR SEND? OR PASS()(ON OR ALONG OR
                  OVER) OR CONVEY? OR TRANSFER?
S9       47017    UPDATE? OR UP()(DATE? ? OR GRAD?) OR CURRENT OR CHANGE? OR
                  MODIF? OR REVIS? OR REVAMP? OR UPGRAD? OR NEW
S10      28938    DOWNLOAD? OR UPLOAD? OR (DOWN OR UP)()LOAD? OR READ? OR TR-
                  ANSFER? OR TRANSMISSION OR TRANSMIT? OR DELIVER? OR SEND? OR -
                  WRITE? OR WRITING
S11      41842    MULTIPLE OR MANY OR PLURAL? OR NUMEROUS OR SEVERAL
S12      20758    SELECT? ? OR PICK? ? OR CHOOS? OR DECID? OR SPECIF? OR DES-
                  IGNAT? OR DETERMIN?
S13         26    (LEAST OR SMALLEST OR MINIMAL OR MINIMUM OR LITTLEST)(2N)(-
                  TIME OR PERIOD? OR INTERVAL? OR DURATION OR FREQUENCY)
S14          3    S3 AND S4 AND (S5 (3N) S7)
S15         14    S3 AND S8 AND (S1 (3N) S2)
S16        102    S10 AND (S9 (3N) S6 (3N) S7)
S17         93    S11 (3N) S9 (3N) S6 (3N) S7
S18          0    S12 AND S13 AND S6
S19          0    S14 AND S15
S20          0    S14 AND S16
S21          0    S14 AND S17
S22         15    S16 AND S17
S23         32    S14 OR S15 OR S22
S24         26    S23 NOT PY>2001
S25         26    S24 NOT PD>20010801
File 256:SoftBase:Reviews,Companies&Prods. 82-2003/Nov
          (c)2003 Info.Sources Inc
```

01044636   DOCUMENT TYPE: Product

PRODUCT NAME: ePDA Platform (044636)

Collective **Communications** Corp (700762
8405 Colesville Rd #650
Silver Spring, MD 20910 United States
TELEPHONE: (301) 588-8550

RECORD TYPE: Directory

CONTACT: Sales Department

Collective **Communications** offers ePDA Platform, a Java-based tool for
delivering business applications to Internet-connected **wireless   devices**
, enabling any member of the business team to access data from the
corporate network in real time, from any location. It is built upon
Collective **Communications** ' ePDA Enterprise Server, Client software, and
ePDA Developer Toolkit. ePDA Platform can be integrated with existing
business processes and is compatible with almost any handheld **device** or
wireless network. It is an easy-to-use tool that allows businesses to
maintain complete centralized control over all applications. Any changes
that are made to ePDA applications are automatically implemented across all
devices. Additionally, new applications, systems, and devices can be
implemented across the enterprise with a single deployment. ePDA Platform
enables users to store and access any file or **object** within their
handheld **device** .

DESCRIPTORS: Computer Security; Handhelds & Palmtops; Mobile Computing;
    Network Administration; Network Inventory; Remote Network Access;
    Wireless Internet

HARDWARE: Java; Thin Clients
OPERATING SYSTEM: Java; Open Systems
PROGRAM LANGUAGES: Java
TYPE OF PRODUCT: Micro
POTENTIAL USERS: Cross Industry, Administrators of Networks with PDAs
PRICE: Available upon request

REVISION DATE: 20010730

00131844   DOCUMENT TYPE: Review

**PRODUCT NAMES: BusinessObjects InfoView Mobile 4.0   (057711); Narrowcast
Server   (057738)**

TITLE: Business intelligence goes wireless
AUTHOR: Sullivan, Tom
SOURCE: InfoWorld,   v23 n27 p17(1) Jul 2, 2001
ISSN: 0199-6649
HOMEPAGE: http://www.infoworld.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

eXtensible Markup Language (XML), Dynamic HyperText Markup Language
(DHTML), Business Objects' InfoView Mobile 4.0, and Microstrategy's
Narrowcast Server are highlighted in a discussion of wirelessly deployed
business intelligence. InfoView Mobile BI software allows people to access
and analyze corporate information using a **wireless   device** . One user is
Matthew Meinert, an IT manager, who produces executive reports and
distributes them to Palm VIIx handhelds so that senior executives can
access the reports from any location. Leaders get real-time information,
which has shortened decision-making cycles. Executive reports are designed
with a dashboard metaphor and are neither too wide nor too long. InfoView
Mobile 4.0 allows customers to download reports onto personal digital
assistants (PDAs) via synchronization, and users can see and peruse the
reports in either connected or offline mode. Business Objects also supports
Pocket IE, Handspring Glazer, and PocketPC **devices** . Among others
targeting users of handheld **client** devices is Microstrategy, with its
Narrowcast Server, a report and information delivery platform that **sends**
out information via e-mail, PDAs, pagers, and wireless or wireline phones.
Other BI vendors, including Cognos, Actuate, and Informatica, are either
building wireless tools or are considering entry to the market. Actuate
partners with Plumtree and with some application server vendors to deliver
Actuate reports in XML or DHTML formats.

COMPANY NAME: Business Objects Inc (527386); MicroStrategy Inc (522643)
SPECIAL FEATURE: Charts
DESCRIPTORS: Alerts; Business Intelligence; Handhelds & Palmtops; HTML;
    Marketing Information; Mobile Computing; Palm; Pocket PC; Real Time
    Data Acquisition; XML
REVISION DATE: 20030228

00124138   DOCUMENT TYPE: Review

PRODUCT NAMES: Surfnotes   (003557); GateWave   (003565)

TITLE: Clip and Save
AUTHOR: Hershman, Tania
SOURCE: Business 2.0, p116(2) May 2000
ISSN: 1080-2681
HOMEPAGE: http://www.business2.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

Surfnotes' namesake site, which automatically culls Web page nuggets
on-the-fly, competes with PassCall's GateWave. However, Timo Poropudas, who
developed Wow! Wireless, says 'Cutting the **information** into **pieces**
conforms with the **wireless   device** 's form factor but it does not help in
understanding the content.' Nevertheless because browsing standard Web
pages on PDAs and mobile phones currently is an unsatisfactory experience,
various providers, including Surfnotes, are providing ways to slice up
standard Web pages into more usable but information-packed mobile formats.
With Surfnotes, users quickly get the gist of Web pages since, says a
Surfnotes spokesperson, 'We...actually understand Web pages...within the
context of what you are looking at, the most important thing the page has
to offer.' Surfnotes are available in multiple types, including business
and e-commerce, sports, entertainment, local services, and medical
information. Surfnotes are accessible from any device with a Web
connection, including PCs, PDAs, and mobile phones. Links provide access to
more information, and the initial Surfnote stays small. Surfnotes is based
on patent-pending technology that slices Web sites by using thousands of
algorithms to recognize subjects and topics.

COMPANY NAME: Surfnotes Technologies Ltd (682071); PassCall Advanced
     Technologies Ltd (682098)
DESCRIPTORS: Cell Phones; Handhelds & Palmtops; Information Retrieval;
     Internet Utilities; Mobile Computing; Wireless Networks
REVISION DATE: 20030330

00123159   DOCUMENT TYPE: Review

PRODUCT NAMES: GIS   (830278); Data Warehouses   (834289)

TITLE: Data Warehouse to Data Powerhouse: The Geospatial Information...
AUTHOR: Black, James D
SOURCE: Business Geographics,   v8 n2 p26(4) Feb 2000
ISSN: 1067-456X
HOMEPAGE: http://www.bg.geoplace.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

Because the key component of a data storage system (including data storage
systems for geographical information systems GISs) is the ability to
provide smooth interaction with end-users' devices, users of the future
will increasingly need more speed and portability for connectivity to
servers, desktops, palmtops, and **cellular** phones. **Portable   devices** of

the future will access ●h applications and data, since ●crosoft, Oracle, and Sun Microsystems all plan to offer software as a service via the Internet. Web-based GIS interfaces and viewers are the first generation of GUIs, and many vendors are competing to add more functions and speed to browser windows. Among the special needs of geospatial data in a data warehouse are the ability to manipulate large raster files; archive source data; process data and value- added data over the same area; and move data to and from production systems to users. The only company building data storage for geospatial IT users classifies data as 'actively used' or 'infrequently used.' Because companies often **keep** every **chunk** of **data** , even **data** that are rarely used, they can have access problems. Therefore, many geospatial data users who process thousands of large graphics files use a hierarchical system that provides more versatility in the 'frequently used' and 'infrequently used' categories. Various data 'powerhouses' are briefly described, including MrSID, TerraServer, and TerraSoar.

COMPANY NAME: Vendor Independent (999999)
SPECIAL FEATURE: Screen Layouts Output Samples
DESCRIPTORS: Cell Phones; Data Warehouses; GIS; Handhelds & Palmtops;
    Mapping; Mobile Computing; Wireless Internet
REVISION DATE: 20030330

00119999   DOCUMENT TYPE: Review

PRODUCT NAMES: DocSpace Drive   (778079)

TITLE: Send, Store **, and Share Files Affordably**
AUTHOR: Heck, Mike
SOURCE: InfoWorld,   v21 n26 p86(2) Nov 15, 1999
ISSN: 0199-6649
HOMEPAGE: http://www.infoworld.com

RECORD TYPE: Review
REVIEW TYPE: Review
GRADE: A

DocSpace Company's DocSpace, a Web collection service, gets very good marks
overall, especially for straightforward document sharing, quick
establishment of virtual teams, stringent access and version control, and
online discussion forums. No important drawbacks were detected during
testing. DocSpace can provide enterprises with a secure Web workspace used
by dispersed teams who can collaborate on ideas and share documents. A
courier function can also economically distribute large **files** to
partners or vendors. DocSpace can lower the cost of projects, reduce time
to completion, and enhance teamwork, while requiring almost no startup
time, training, or infrastructure investment. As more and more companies
move toward outsourced Web-based services, DocSpace fits in as a product
that allows users to **store** , deliver, and collaborate on any type of
document via a Web browser. Competing products require users to install
code on their own servers while DocSpace can have the user's system
configured in just minutes. In addition, users' internal technical staff
need not spend time installing and supporting more code. Plausible business
uses abound for DocSpace and include workgroup communication,
telecommuting, and use with **mobile   devices** to gain continuous access to
updated documents.

COMPANY NAME: Critical Path Inc (670413)
SPECIAL FEATURE: Charts Screen Layouts
DESCRIPTORS: Conferencing; Document Management; Groupware; Intranets
REVISION DATE: 20000430

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.

00105402   DOCUMENT TYPE: Review

PRODUCT NAMES: EPOC (690911)

TITLE: 32-Bit Operating System Rises To Challenge Windows CE
AUTHOR: Williams, Tom
SOURCE: Electronic Design,   v45 n20 p144(2) Sep 15, 1997
ISSN: 0013-4872
HOMEPAGE: http://www.elecdesign.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

PSION's EPOC32, an operating system (OS) platform, supports the handheld
computer and smart phone market. It is interesting enough to spark renewed
interest in many **mobile** ROM-based **devices** ,. The Pilot personal digital
assistant, for instance, has been a popular product, as are cellular
telephones and handheld PCs (HPCs). HPCs run Microsoft's Microsoft Windows
CE, a spin-off of Windows 95. Microsoft's interest in the HPC market
created a whirlwind of development among OS vendors for mobile computing
and **communications** devices. Only one of the competing OSs, GEOS, was
designed from the outside for **mobile** , handheld **devices** , while Fujitsu's
HPC runs a full version of Windows 95. EPOC32 employs a modular
architecture based on a client/server model. A central 'tower' of modules
is set up to allow each module up the line to use the services of modules
below. A base module includes a real-time kernel, a set of device drivers,
a user library, and a file server. The user library provides basic services
that manage all user threads, including memory cleanup. An engine support
module is above the base module to support application functions, including
a set of abstract base classes for graphics, a basic databse manager, and
basic utilities. EPOC32 is very portable among **processors** , but **targets**
the ARM architecture of Advanced RISC machines.

COMPANY NAME: Symbian Inc (671924)
DESCRIPTORS: Client/server; Electronics; Embedded Systems; Handhelds &
     Palmtops; Mobile Computing; Network Software; Operating Systems; RISC
     Systems; Telecommunications; Windows CE
REVISION DATE: 20010430

00080237   DOCUMENT TYPE: Review

PRODUCT NAMES: IntelliLink for Windows 3.3.1   (355771); AvailWorks for
Newton 2.0   (571288); Avail ClipArt for Newton   (571296)

TITLE: Roaming Around the Mobile Computing Industry
AUTHOR: Staff
SOURCE: Pen-Based Computing,   v5 n7 p4(2) Jul 1995
ISSN: 1054-4011
HOMEPAGE: http://www.volksware.com/pbc

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

IntelliLink for Windows 3.3.1 is one of many products from IntelliLink
designed to convert and move data among desktop and **mobile   computers** ,
including personal digital assistants (PDAs). The product provides support
for Sharp's Zaurus, a keyboard and pen-based, handheld PDA; other platforms
supported include Lotus Organizer 2.0, ACT! For Windows 2.0, and
WordPerfect for Windows 6.0. The product **transfers** data among platforms
and translates information for display on the **target   device** . AvailWorks
for Newton 2.0 helps Newton PDA users create attractive documents,
providing an integrated feature set, including word processing,
spreadsheet, draw, and graph functions, in one application. Ease of use is
paramount, and two clip art libraries are included. The developer, Avail
Technologies, also announced Avail ClipArt for Newton, a series of five
clip art packages.

COMPANY NAME: IntelliLink Corp (520292); Avail Technology Inc (581062)
DESCRIPTORS: Apple Newton; Clip Art; Data **Communications** ; Graphics Tools
    ; Handhelds & Palmtops; IBM PC & Compatibles; Mobile Computing; Mouse
    Alternatives; Office Automation; Office Suites; Pen Software; Pen
    Windows; Spreadsheets; Word Processing
REVISION DATE: 19990630

00067800   DOCUMENT TYPE: Review

PRODUCT NAMES: Telescript   (440647); MagicCap   (444464)

TITLE: General Magic's Agents: A More Flexible EDI
AUTHOR: Davis, Arnold
SOURCE: Datamation,   v40 n16 p51(2) Aug 15, 1994
ISSN: 0011-6963
HOMEPAGE: http://www.datamation.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

The software underlying the coming generation of personal intelligent
communicators may also change the way data is exchanged across networks.
General Magic's Telescript, the technology underlying the company's Magic
Cap operating environment, will be shipping on several intelligent
communicators . Once Telescript is installed on a target server, users can
send agent-programs to the server from the handheld device or a desktop
machine. Although Telescript **sends** only small agents, the system is
powerful because of the capabilities of the server-based Telescript system.
In Telescript's remote programming approach, the **client   sends** an
object that the server then executes. It is not necessary for the agent to
contain the underlying code to perform the task. Telescript has the
potential to be used in EDI, since it can allow interchange of data with
computers from any organization.

COMPANY NAME: General Magic (554413)
SPECIAL FEATURE: Screen Layouts
DESCRIPTORS: **Client** /server; Laptops; **Mobile** Computing; Network
     Software
REVISION DATE: 20010730

```
 Set    Items    Description

 S1    2132374   TARGET? OR OBJECT? OR GOAL? OR DESTINATION?
 S2    8179140   DEVICE? OR CLIENT? OR NODE? OR  TERMINAL OR PROCESSOR? OR -
                 MICROPROCESSOR? OR COMPUTER? OR MICROCOMPUTER? OR UNIT? OR IN-
                 STRUMENT?
 S3      49989   (WIRELESS OR WIRE()LESS OR MOBILE OR PORTABLE OR CELLULAR -
                 OR CELL OR IN()RANGE OR INRANGE)(2N)(DEVICE? OR CLIENT? OR NO-
                 DE? OR COMPUTER? OR TERMINAL)
 S4     662528   STORE OR STORING OR SAVE OR SAVING OR KEEP OR KEEPING OR P-
                 RESERV?
 S5    6406445   PART? OR BLOCK? OR CHUNK? OR SEGMENT? OR PIECE?
 S6     669509   VERSION? OR EDITION? OR RELEASE?
 S7    6754835   FILE? OR DATA OR INFORMATION OR RECORD?
 S8    2955683   COMMUNICAT? OR TRANSMIT? OR SEND? OR PASS()(ON OR ALONG OR
                 OVER) OR CONVEY? OR TRANSFER?
 S9    8257517   UPDATE? OR UP()(DATE? ? OR GRAD?) OR CURRENT OR CHANGE? OR
                 MODIF? OR REVIS? OR REVAMP? OR UPGRAD? OR NEW
 S10   3451994   DOWNLOAD? OR UPLOAD? OR (DOWN OR UP)()LOAD? OR READ? OR TR-
                 ANSFER? OR TRANSMISSION OR TRANSMIT? OR DELIVER? OR SEND? OR -
                 WRITE? OR WRITING
 S11   3245435   MULTIPLE OR MANY OR PLURAL? OR NUMEROUS OR SEVERAL
 S12   4936248   SELECT? ? OR PICK? ? OR CHOOS? OR DECID? OR SPECIF? OR DES-
                 IGNAT? OR DETERMIN?
 S13     34505   (LEAST OR SMALLEST OR MINIMAL OR MINIMUM OR LITTLEST)(2N)(-
                 TIME OR PERIOD? OR INTERVAL? OR DURATION OR FREQUENCY)
 S14        24   S3 AND S4 AND (S5 (3N) S7)
 S15       208   S3 AND S8 AND (S1 (2N) S2)
 S16       656   S10 AND (S9 (3N) S6 (3N) S7)
 S17       352   S11 (3N) S9 (3N) S6 (3N) S7
 S18       279   S12 AND S13 AND S6
 S19         0   S14 AND S15
 S20         0   S14 AND S16
 S21         0   S14 AND S17
 S22         0   S14 AND S18
 S23         0   S17 AND S18
 S24   1096227   S9 AND S11
 S25      9424   S12 AND S13
 S26       674   S24 AND S25
 S27         2   S26 AND S3
 S28       130   S26 AND S10
 S29         0   S28 AND S3
 S30         0   S14 AND (S1 (2N) S2)
 S31         0   S15 AND S16
 S32         0   S15 AND S17
 S33         0   S15 AND S18
 S34         4   S14 AND S24
 S35        26   S15 AND S24
 S36       171   S16 AND S24
 S37       352   S17 AND S24
 S38        35   S18 AND S24
 S39       569   S14 OR S27 OR S34 OR S35 OR S36 OR S37 OR S38
 S40        57   S39 AND S3
 S41        49   S40 NOT PY>2001
 S42        49   S41 NOT PD>20010801
 S43        39   RD (unique items)
 File   8:Ei Compendex(R) 1970-2003/Dec W3
           (c) 2003 Elsevier Eng.  Info. Inc.
 File  35:Dissertation Abs Online 1861-2003/Nov
           (c) 2003 ProQuest Info&Learning
 File 103:Energy SciTec 1974-2003/Dec B1
           (c) 2003 Contains copyrighted material
 File 202:Info. Sci. & Tech. Abs. 1966-2003/Nov 17
           (c) 2003 EBSCO Publishing
 File  65:Inside Conferences 1993-2003/Dec W4
           (c) 2003 BLDSC all rts. reserv.
 File   2:INSPEC 1969-2003/Dec W2
           (c) 2003 Institution of Electrical Engineers
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43/5/1   (Item 1 from file: 8)

06620634   E.I. No: EIP03477738410
   Title: **Efficiently synchronizing multidimensional schema data**
   Author: Schlesinger, L.; Bauer, A.; Lehner, W.; Ediberidze, G.; Gutzmann, M.
   Corporate   Source: Department   of   Database   Systems   Univ.   of Erlangen-Nuremberg, 91058 Erlangen, Germany
   Conference Title: DOLAP 2001: ACM Fourth International Workshop on Data Warehousing and OLAP: in conjuction with the Tenth International Conference on Information and Knowledge Management (CIKM 2001)
   Conference   Location: Atlanta, GA, United States   Conference Date: 20011109-20011109
   Sponsor: ACM; SIGIR; SIGMIS
   E.I. Conference No.: 61760
   Source: ACM International Workshop on Data Warehousing and OLAP (DOLAP) 2001. p 69-76
   Publication Year: 2001
   Language: English
   Document Type: CA; (Conference Article)   Treatment: T; (Theoretical)
   Journal Announcement: 0312W1
   Abstract: Most existing concepts in data warehousing provide a central database system **storing** gathered raw data and redundantly computed materialized views. While in **current** system architectures client tools are sending queries to a central data warehouse system and are only used to graphically present the result, the steady rise in power of personal computers and the expansion of network bandwidth makes it possible to **store** replicated **parts** of the **data** warehouse at the client thus **saving** network bandwidth and utilizing local computing power. Within such a scenario a – potentially **mobile** – **client** does not need to be connected to a central server while performing local analyses. Although this scenario seems attractive,   **several** problems arise by introducing such an architecture: For example schema data could be **changed** or **new** fact data could be available. This paper is focusing on the first problem and presents ideas on how **changed** schema data can be detected and efficiently synchronized between client and server exploiting the special needs and requirements of data warehousing. 19 Refs.
   Descriptors: *Data warehouses; Data storage equipment; Client server computer systems; Computational methods; Computer architecture; Query languages; Computer graphics; Personal computers; Bandwidth; Computer networks; Synchronization
   Identifiers: Multidimensional schema data; Network bandwidth
   Classification Codes:
   723.3 (Database Systems); 722.1 (Data Storage, Equipment & Techniques); 722.4 (Digital Computers & Systems); 721.1 (Computer Theory (Includes Formal Logic, Automata Theory, Switching Theory & Programming Theory)); 723.5 (Computer Applications); 716.1 (Information & Communication Theory)
   723 (Computer Software, Data Handling & Applications); 722 (Computer Hardware); 721 (Computer Circuits & Logic Elements); 716 (Electronic Equipment, Radar, Radio & Television)
   72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATION ENGINEERING)

   43/5/2   (Item 2 from file: 8)

06039202   E.I. No: EIP02166920452
   Title: **Proof-of-concept prototype of a Portable Wireless Battlefield Ministration Tracking System**
   Author: Impson, Jeremy; Kupst, Shirley; Mehravari, Nader
   Corporate Source: Advanced Technology Department Lockheed Martin Systems Integration, Owego, NY 13827, United States
   Conference   Title: Milcom 2001: Communications for Network-Centric

   Conference   Location: McLean,   VA,   United   States   Conference Date: ·
20011028-20011031
   Sponsor: IEEE
   E.I. Conference No.: 59101
   Source: Proceedings - IEEE Military Communications Conference MILCOM v 1
2001. p 550-554 (IEEE cat n 01ch37277)
   Publication Year: 2001
   CODEN: PMICET
   Language: English
   Document Type: CA; (Conference Article)   Treatment: T; (Theoretical)
   Journal Announcement: 0204W3

   Abstract: To remain relevant and current with the evolution of warfare
and battlefields in the 21**s**t Century, in 1998, US Army had identified
a need for an innovative approach to the delivery of the emergency
ministration, pastoral care, and other battlefield religious support to
the Warfighter. Through it Advanced Concepts and Technology (ACT II)
program Topic Number 99-CSS-08, Army outlined the requirements to provide
effective and innovative combat support services of a projection force's
emergency religious operations: "to provide the Unit Ministry Team (UMT)
with capability to digitally track and transmit emergency ministration and
pastoral care information to a data collection·point for use by casualty
assistance offices and notification of next-of-kin." To respond to this
requirement, in 1999, we researched and designed an architecture for a
"Portable, Wireless Battlefield Ministration Tracking and Information
System." Our proposed system solution provides the members of the Unit
Ministry Team (UMT) and other appropriate personnel with the capability to
digitally **store** and transmit casualty emergency ministrations and
pastoral care information via hand-held and **mobile** **wireless** computing
devices to a centralized **data** collection point. As **part** of this
one-year research and development program, we developed a working
proof-of-concept prototype of our proposed solution which was successfully
demonstrated. In this paper we describe the developed prototype and the
associated demonstration scenarios. 1 Refs.
   Descriptors: *Military communications; Wireless telecommunication systems
; Mobile computing; Tracking (position); Report generators; Computer
networks
   Identifiers: **Mobile**   **wireless** computing **devices**
   Classification Codes:
   723.1.1 (Computer Programming Languages)
   404.1 (Military Engineering); 716.2 (Radar Systems & Equipment); 723.1
(Computer Programming)
   404 (Civil Defense & Military Engineering); 716 (Electronic Equipment,
Radar, Radio & Television); 723 (Computer Software, Data Handling &
Applications); 722 (Computer Hardware)
   40 (CIVIL ENGINEERING, GENERAL); 71 (ELECTRONICS & COMMUNICATION
ENGINEERING); 72 (COMPUTERS & DATA PROCESSING)

   43/5/3   (Item 3 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)

05939728   E.I. No: EIP01466727681
   Title: **Recording and** storing   **of electrical signals for diagnostics
purposes**
   Author: Ponomaryov, V.; Badillo, L.; Fonseca, W.; Juarez, C.; Sanchez, J.
; Vega, J.
   Corporate Source: Inst. Politecnico Nacional ESIME Mexico, Mexico, D.F.
04430, Mexico
   Conference Title: Component and Systems Diagnostics, Prognosis, and
Health Management
   Conference   Location: Orlando, FL, United States   Conference Date:
20010416-20010417
   Sponsor: SPIE
   E.I. Conference No.: 58666
   Source: Proceedings of SPIE - The International Society for Optical

Abstract: We develop hardware and software for a long-term storage telemetry digital system. The system can be used for **storing** digitally in PCMCIA ATA flash memory card 33 analog channel data during several hours at low sample rate. The system is a portable unit powered by battery and contains 33 analog to digital converter, C/C++ programmable micro controller and PCMCIA memory. The proposed system could be reinstalled for up to 66 channels. The implemented unit is lightweight (about 1 pound). The unit records, converts, and stores the electric signals from sensors during the equipment operation. Some time after the flash memory will be downloaded at a commercial PC or a **portable   computer** in a laboratory for diagnostic purposes. **Data** are stored in **blocks** of 512 bytes in PCMCIA memory (one sector). To optimize the memory available we used the compression technique based in wavelet functions. 8 Refs.
Descriptors: *Digital storage; Computer aided diagnosis; Telemetering; Data compression; Sensors; Flash memory; High level languages; Wavelet transforms; Optimization
Identifiers: Electrical signals
Classification Codes:
723.1.1   (Computer Programming Languages)
722.1   (Data Storage, Equipment & Techniques); 461.1   (Biomedical Engineering); 723.5   (Computer Applications); 723.2   (Data Processing); 732.2   (Control Instrumentation); 723.1   (Computer Programming); 921.3 (Mathematical Transformations); 921.5   (Optimization Techniques)
722   (Computer Hardware); 461   (Bioengineering); 723   (Computer Software, Data Handling & Applications); 732   (Control Devices); 921   (Applied Mathematics)
72   (COMPUTERS & DATA PROCESSING); 46   (BIOENGINEERING); 73   (CONTROL ENGINEERING); 92   (ENGINEERING MATHEMATICS)

43/5/4   (Item 4 from file: 8)

    Abstract: Humans live and interact within the real world but our **current** online world neglects this. This paper explores research into Personal Roving Presence (PRoP) devices that provide a physical mobile proxy, controllable over the Internet to provide tele-embodiment. Leveraging off of its physical presence in the remote space, PRoPs provide important human verbal and non-verbal **communication** cues. The ultimate **goal** is a **computer** mediated **communication** (CMC) tool for rich natural human interaction beyond currently available systems. This paper examines PRoP design choices, system architecture, social issues, and evaluations of **several** user studies. 28 Refs.
    Descriptors: *Mobile robots; Man machine systems; Telecontrol equipment; Internet; Robotics; Telemetering systems; Cameras; Microphones; Liquid crystal displays; Servomotors; Web browsers; Computer applications
    Identifiers: Social tele-embodiment; Personal Roving Presence **device** ; Physical **mobile** proxy; Human verbal **communication** ; Non-verbal **communication** ; Computer mediated **communication**

Classification Codes:
731.5 (Robotics); 731.1 (Control Systems); 732.1 (Control Equipment);
723.1 (Computer Programming); 716.1 (Information & Communication Theory);
742.2 (Photographic Equipment)
731 (Automatic Control Principles & Applications); 732 (Control
Devices); 723 (Computer Software, Data Handling & Applications); 716
(Electronic Equipment, Radar, Radio & Television); 742 (Cameras &
Photography)
73 (CONTROL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING); 71
(ELECTRONICS & COMMUNICATION ENGINEERING); 74 (LIGHT & OPTICAL TECHNOLOGY)

43/5/5   (Item 5 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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05837616   E.I. No: EIP01226526982
   Title: **Power efficiency and latency for a semi-batch power management
model in a palmtop multimedia terminal**
   Author: Hu, J.R.; Bai, Y.W.
   Corporate Source: Department of Electronic Engineering Fu Jen Catholic
University, Taipei 242, Taiwan
   Source: International Journal of Computers and Applications v 23 n 1
2001. p 10-16 202-1171
   Publication Year: 2001
   CODEN: IJCAFW   ISSN: 1206-212X
   Language: English
   Document Type: JA; (Journal Article). Treatment: T; (Theoretical)·
   Journal Announcement: 0106W5

   Abstract: Based on the analysis of the stationary non-time-varying state
probability model, this paper shows the relationship between power
efficiency and latency of mobile information processing under a semi-batch
power management method. According to the semi-batch information
processing model, the **mobile   terminal** can work at the waiting state
with low power consumption and in the mean time accumulate information in
the terminal information queue. When the amount of accumulated information
reaches a preset level, then the machine can switch to busy state and
process the accumulated information. In an ideal situation, we have a
potential to **save** around 70% power consumption, if we can tolerate
around three times the latency of a real-time palmtop multimedia terminal.
As well, a mobile user would prefer to see an entire **piece** of
information instead of seeing the fragments of a picture sporadically.
For these reasons, the semi-batch power management model for a palmtop
multimedia terminal can be useful. 15 Refs.
   Descriptors: *Multimedia systems; Electric power supplies to apparatus;
Hand held computers; Data processing; Real time systems; Probability;
Mathematical models
   Identifiers: Palmtop multimedia terminal; Power management model; Power
consumption
   Classification Codes:
   723.5 (Computer Applications); 722.4 (Digital Computers & Systems);
723.2 (Data Processing); 922.1 (Probability Theory)
   723 (Computer Software, Data Handling & Applications); 722 (Computer
Hardware); 922 (Statistical Methods)
   72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS)

43/5/6   (Item 6 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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05796695   E.I. No: EIP01025546621
   Title: **Experience in teaching a graduate course in mobile computing**
   Author: Gupta, S.K.S.; Srimani, P.K.
   Corporate Source: Colorado State Univ, Fort Collins, CO, USA
   Conference Title: 30th Annual Frontiers in Education Conference -Building
on a Century of Progress in Engineering Education

Abstract: The need for `information anywhere anytime' has been a driving
force for the increasing growth in Web and Internet technology, wireless
communication , and **portable** computing **devices** . The field of mobile
computing is the merger of these advances in computing and **communication**
with the aim of providing seamless and ubiquitous computing environment for
mobile users. Mobile computing environments are characterized by severe
resource constraints and frequent **changes** in operating conditions. This
has motivated research in **many** challenging problems which span **several**
areas of computer science, computer engineering and electrical engineering,
such as network protocols to support mobility, efficient and adaptive
resource management techniques for wireless bandwidth and battery power,
predicting mobility patterns, performance modeling and simulation of mobile
applications, and supporting mobile real-time multimedia applications. This
paper describes the experience of the authors in designing and teaching a
senior/graduate level mobile computing course at Colorado State University.
This course was designed for students in computer science, electrical
engineering and **computer** engineering. The **goal** was to provide an
in-depth understanding of the fundamental problems in the area of mobile
computing and present the existing and proposed solutions for these
problems from both research and development perspectives. In addition to
regular homeworks and exams, students did term projects/papers to explore
topics of their interest in more depth. **Several** mid-term and
end-of-semester evaluations were done to gauge student satisfaction and
short-comings of the course. These evaluations were very positive. **Many**
students found the breadth of the information provided in the class very
stimulating. Some students mentioned that they would have liked a course
textbook along with the course material. (Author abstract) 24 Refs.
   Descriptors: *Engineering education; Mobile computing; Teaching; World
Wide Web; Curricula; Research and development management
   Identifiers: Graduate courses
   Classification Codes:
   901.2 (Education); 901.3 (Engineering Research); 912.2 (Management)
   901 (Engineering Profession); 723 (Computer Software); 912 (Industrial
Engineering & Management)
   90 (GENERAL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING); 91
(ENGINEERING MANAGEMENT)

   43/5/7   (Item 7 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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05420840   E.I. No: EIP99114911835
   **Title: MODEC: A multi-granularity mobile object-oriented database caching
mechanism, prototype and performance**
   Abstract: An inherent limitation in mobile data access is due to the
unreliable and low bandwidth wireless **communication** channel. Caching of
useful database items from database server in local storage of **mobile
clients** is effective in reducing data access latency and wireless
bandwidth consumption. In the event of disconnection, cached data can also

serve the purpose of par█l query processing. In this pa█, we present
the implementation and evaluate a **new** caching mechanism for
object-oriented database systems in a mobile environment called MODEC.
MODEC possesses the capabilities of performing caching at **multiple**
granularities and adapting to **changes** in data access pattern, providing
improved performance through tolerating limited inconsistency to read-only
transactions. This caching capabilities is supported via standard ODMG
modeling constructs. The prototype of MODEC is implemented using ODE
database. Empirical system performance results are obtained from
experiments on the prototype with data from a real-life database. The
results are validated against results obtained via detailed simulation
studies on MODEC. Both sets of results are found to be consistent and are
in favor of our MODEC mechanism in providing a feasible solution to the
mobile data access problem under the constraints in a mobile environment.
(Author abstract) 38 Refs.
  Descriptors: Distributed database systems; Mobile computing; Wireless
telecommunication systems; Mobile telecommunication systems; Buffer storage
; Bandwidth; **Computer** simulation; **Object** oriented programming
  Identifiers: Mobile object-oriented database caching (MODEC) systems
  Classification Codes:
  723.3 (Database Systems); 722.1 (Data Storage, Equipment & Techniques);
716.1 (Information & Communication Theory); 723.5 (Computer Applications)
  723 (Computer Software); 716 (Radar, Radio & TV Electronic Equipment);
722 (Computer Hardware)
  72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS)

  43/5/8   (Item 8 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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05321541   E.I. No: EIP99074730600
  Title: **Preoperative patient assessment and data collection with a
handheld computer**
  Author: Moenk, S.; Baldering, H.-J.; Schnaus, P.; Heinrichs, W.
  Corporate Source: Johannes Gutenberg-Univ, Mainz, Ger
  Source: Journal of Clinical Monitoring and Computing v 15 n 1 1999. p 65
  Publication Year: 1999
  CODEN: JCMCFG   ISSN: 1387-1307
  Language: English
  Document Type: JA; (Journal Article)   Treatment: A; (Applications)
  Journal Announcement: 9909W2
  Abstract: A **mobile   computer** system was developed for mobile
preoperative **data** collection. In **particular** , a program was written for
the HP Palmtop 200 LX (HP). The resulting program is capable of **storing**
the necessary information in a comfortable way: LIFASPAL. The system was
evaluated in one surgical department. Preliminary results indicate that
data collection does not require more time than with the manual system.
Preoperative assessment sheets were found to be better legible and less
deficient than before. 3 Refs.
  Descriptors: *Medical computing; Database systems; Patient monitoring;
Hospital data processing; Operating rooms; Anesthesiology; HTML; World Wide
Web; Computer software
  Identifiers: Patient assessment; Data collection; Handheld computer
system
  Classification Codes:
  723.5 (Computer Applications); 461.1 (Biomedical Engineering); 723.3
(Database Systems); 461.6 (Medicine); 462.2 (Hospitals, Equipment &
Supplies)
  723 (Computer Software); 461 (Biotechnology); 462 (Medical Engineering
& Equipment)
  72 (COMPUTERS & DATA PROCESSING); 46 (BIOENGINEERING)

  43/5/9   (Item 9 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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05202648 E.I. No: EIP99014529991
   Title: Ground plane detection by fusing visual and inertial information
   Author: Lobo, Jorge; Dias, Jorge
   Corporate Source: Univ of Coimbra, Coimbra, Port
   Conference Title: Proceedings of the 1998 5th International Workshop on Advanced Motion Control, AMC
   Conference Location: Coimbra, Portugal Conference Date: 19980629-19980701
   E.I. Conference No.: 49469
   Source: International Workshop on Advanced Motion Control, AMC 1998. IEEE, Piscataway, NJ, USA. p 175-179
   Publication Year: 1998
   CODEN: 002388
   Language: English
   Document Type: CA; (Conference Article) Treatment: T; (Theoretical)
   Journal Announcement: 9903W1

   Abstract: In mobile systems the position and attitude of active vision system's cameras can be hard to determine. Inertial sensors coupled to the active vision system can provide valuable information, as happens with the vestibular system in human and other animals. In this article, we present our integrated inertial and vision systems. The active vision system has a set of stereo cameras capable of vergence, with a common baseline, pan and tilt, and an implemented process of visual fixation. An inertial system prototype, based on low-cost sensors, was built. The inertial sensor **data** is used to **segment** the ground plane in the images. It is used to **keep** track of the gravity vector, allowing the identification of the vertical in the images. By performing visual fixation of a ground plane point, and knowing the 3D vector normal to level ground, we can determine the ground plane. The image can therefore be segmented, and the ground plane along which the robot can move identified. (Author abstract) 7 Refs.
   Descriptors: **Computer** vision; **Mobile** robots; Cameras; Stereo vision; Sensors
   Identifiers: Active vision system; Inertial information systems
   Classification Codes:
   741.2 (Vision); 723.5 (Computer Applications); 731.5 (Robotics); 742.2 (Photographic Equipment); 732.2 (Control Instrumentation)
   741 (Optics & Optical Devices); 723 (Computer Software); 731 (Automatic Control Principles); 742 (Cameras & Photography); 732 (Control Devices)
   74 (OPTICAL TECHNOLOGY); 72 (COMPUTERS & DATA PROCESSING); 73 (CONTROL ENGINEERING)

   43/5/10   (Item 10 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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05056911   E.I. No: EIP97093813059
   Title: Compact VLSI neural computer integrated with active pixel sensor for real-time ATR applications
   Author: Fang, Wai C.; Udomkesmalee, Gabriel; Alkalai, Leon
   Corporate Source: Jet Propulsion Lab., Pasadena, CA, USA
   Conference Title: Applications and Science of Artificial Neural Networks III
   Conference Location: Orlando, FL, USA Conference Date: 19970421-19970424
   Sponsor: SPIE - Int Soc for Opt Engineering, Bellingham, WA USA
   E.I. Conference No.: 23059
   Source: Proceedings of SPIE - The International Society for Optical Engineering v 3077 1997. Society of Photo-Optical Instrumentation Engineers, Bellingham, WA, USA. p 266-275
   Publication Year: 1997
   CODEN: PSISDG   ISSN: 0277-786X   ISBN: 0-8194-2492-7
   Language: English
   Document Type: CA; (Conference Article) Treatment: A; (Applications)
   Journal Announcement: 9809W1

Abstract: A compact VL●neural computer integrated wit●n active pixel sensor has been under development to mimic what is inheren●in biological vision systems. This electronic eye- brain **computer** is **targeted** for real-time machine vision applications which require both high-bandwidth **communication** and high-performance computing for data sensing, synergy of **multiple** types of sensory information, feature extraction, target detection, target recognition, and control functions. The neural computer is based on a composite structure which combines Annealing Cellular Neural Network (ACNN) and Hierarchical Self-Organization Neural Network (HSONN). The ACNN architecture is a programmable and scalable multi- dimensional array of annealing neurons which are locally connected with their local neurons. Meanwhile, the HSONN adopts a hierarchical structure with nonlinear basis functions. The ACNN plus HSONN neural computer is effectively designed to perform programmable functions for machine vision processing in all levels with its embedded host processor. It provides a two order-of-magnitude increase in computation power over the state-of-the-art microcomputer and DSP microelectronics. A compact **current**-mode VLSI design feasibility of the ACNN plus HSONN neural computer is demonstrated by a 3D 16 multiplied by 8 multiplied by 9-cube neural processor chip design in a 2- mu m CMOS technology. Integration of this neural computer as one slice of a 4' multiplied by 4' multichip module into the 3D MCM based avionics architecture for NASA's **New** Millennium Program is also described. 11 Ref.

Descriptors: *Pattern recognition; Neural networks; VLSI circuits; Control systems; Image processing; Computer vision; Microcomputers; Microelectronics; Avionics; Multichip modules

Identifiers: VLSI neural computers; Electronic eye-brain **computers** ; Annealing **cellular** neural network; Heirarchical self-organization neural network

Classification Codes:
723.4 (Artificial Intelligence); 714.2 (Semiconductor Devices & Integrated Circuits); 731.1 (Control Systems); 741.1 (Light/Optics); 722.4 (Digital Computers & Systems); 652.1 (Aircraft, General)
723 (Computer Software); 714 (Electronic Components); 731 (Automatic Control Principles); 741 (Optics & Optical Devices); 722 (Computer Hardware); 652 (Aircraft)
72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS); 73 (CONTROL ENGINEERING); 74 (OPTICAL TECHNOLOGY); 65 (AEROSPACE ENGINEERING)

43/5/11   (Item 11 from file: 8)

04761057   E.I. No: EIP97073740193
Title: Layered architecture for office delivery **robots**
Author: Simmons, Reid; Goodwin, Richard; Haigh, Karen Zita; Koenig, Sven; O'Sullivan, Joseph
Corporate Source: Carnegie Mellon Univ, Pittsburgh, PA, USA
Conference Title: Proceedings of the 1997 1st International Conference on Autonomous Agents
Conference   Location: Marina   del   Rey,   CA,   USA   Conference   Date: 19970205-19970208
Sponsor: ACM SIGART
E.I. Conference No.: 46654
Source: Proceedings of the Interantional Conference on Autonomous Agents 1997. ACM, New York, NY, USA. p 245-252
Publication Year: 1997
CODEN: 002624
Language: English
Document Type: CA; (Conference Article)   Treatment: G; (General Review)
Journal Announcement: 9709W2
Abstract: Office **delivery** robots have to perform **many** tasks. They have to determine the order in which to visit offices, plan paths to those offices, follow paths reliably, and avoid static and dynamic obstacles in the process. Reliability and efficiency are key issues in the design of

such autonomous robot systems. They must deal reliably with noisy sensors and actuators and with incomplete knowledge of the environment. They must also act efficiently, in real time, to deal with dynamic situations. Our architecture is composed of four abstraction layers: obstacle avoidance, navigation, path planning, and task scheduling. The layers are independent, communicating processes that are always active, processing sensory **data** and status **information** to **update** their decisions and actions. A **version** of our robot architecture has been in nearly daily use in our building since December 1995. As of July 1996, the robot has traveled more than 75 kilometers in service of over 1800 navigation requests that were specified using our World Wide Web interface. (Author abstract) 26 Refs.

Descriptors: **Mobile** robots; **Computer** architecture; Reliability; Sensors; Actuators; Artificial intelligence; Wide area networks; User interfaces; Office automation

Identifiers: Office **delivery** robots

Classification Codes:

731.5 (Robotics); 913.3 (Quality Assurance & Control); 732.2 (Control Instrumentation); 732.1 (Control Equipment); 723.4 (Artificial Intelligence)

731 (Automatic Control Principles); 723 (Computer Software); 913 (Production Planning & Control); 732 (Control Devices)

73 (CONTROL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING); 91 (ENGINEERING MANAGEMENT)

43/5/12   (Item 12 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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04733115   E.I. No: EIP97073707974
Title: **Thermal modeling of high performance packages in** portable computers

Author: Viswanath, Ram; Ali, Ihab A.
Corporate Source: Intel Corp, Chandler, AZ, USA

Abstract: An experimental and numerical study was conducted to determine the thermal performance of the Pentium Processor in a tape carrier package (TCP) operating inside a typical **portable computer** . The **objective** of this study is to develop a validated system level model of the portable environment and demonstrate that equipment designers can carry out design iterations of possible heat **transfer** configurations to analyze cost, performance, and manufacturability tradeoffs. A detailed three-dimensional (3-D) numerical model of the package was constructed using a computational fluid dynamic software. In the interest of keeping the computational model tractable, some simplifying assumptions were employed to obtain equivalent compact models of the various components in the computer. The fluid motion is essentially a buoyancy driven convection inside an enclosure with **multiple** discrete heat sources. An experimental study was conducted to validate the numerical model. The results obtained indicate that the model is in good agreement with the experimental data, both qualitatively and quantitatively. Subsequent design iterations were conducted and thermal performance limits were established for various package families. The validated model was used to investigate design **modifications** to improve thermal performance through increased printed circuit board (PCB) thermal conductivity and the inclusion of heat spreaders, heat pipes, and vented enclosures. (Author abstract) 15 Refs.

Descriptors: *Microprocessor chips; Natural convection; Computational fluid dynamics; Numerical methods; Printed circuit boards; Computer simulation

Identifiers: Thermal modeling; Thermal management; Tape carrier package

Classification Codes:
714.2 (Semiconductor Devices & Integrated Circuits); 641.2 (Heat
Transfer); 723.5 (Computer Applications); 931.1 (Mechanics)
714 (Electronic Components); 721 (Computer Circuits & Logic Elements);
722 (Computer Hardware); 641 (Heat & Thermodynamics); 723 (Computer
Software); 931 (Applied Physics)
71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING); 64
(HEAT & THERMODYNAMICS); 93 (ENGINEERING PHYSICS)

43/5/13   (Item 13 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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04640761   E.I. No: EIP97033546098
   **Title: Knowledge sharing among multiple autonomous mobile robots
through indirect communication using intelligent data carriers**
   Author: Fujii, Teruo; Asama, Hajime; Fujita, Takanori; Asakawa, Yuji;
Kaetsu, Hayato; Matsumoto, Akihiro; Endo, Isao
   Corporate Source: Inst of Physical and Chemical Research (RIKEN),
Saitama, Jpn
   Conference Title: Proceedings of the 1996 IEEE/RSJ International
Conference on Intelligent Robots and Systems, IROS. Part 3 (of 3)
   Conference Location: Osaka, Jpn   Conference Date: 19961104-19961108
   Sponsor: IEEE; RSJ
   E.I. Conference No.: 46119
   Source: IEEE International Conference on Intelligent Robots and Systems v
3 1996. IEEE, Piscataway, NJ, USA,96CH35908. p 1466-1471
   Publication Year: 1996
   CODEN: 85RBAH
   Language: English
   Document Type: CA; (Conference Article)   Treatment: A; (Applications); X
; (Experimental)
   Journal Announcement: 9704W4
   Abstract: This paper proposes a **new** strategy for knowledge sharing
among **multiple** autonomous mobile robots using newly developed Intelligent
Data Carriers (IDCs) to make the multi-robot system more flexible and
robust against complex environmental conditions and, to reduce the amount
of global **communication** for mutual exchange of information which is
useful locally in a limited area. The IDC is an immobile but **portable
device** (data carrier) for information storage and management with a unique
mushroom-like structure to be easily handled by a forklift mechanism which
can be mounted on actual mobile robots. A robot can place a unit at a
specific location in its working environment and write locally relevant
knowledge into the unit. Other robots can share the knowledge which should
indicate the existence of specific **instruments** , **objects** or
topographies, e.g., dead ends, drop-offs, steps, etc., by reading from the
placed IDC units. The handling method of the IDC unit is examined through
the experiment using an omni-directional mobile robot. It is shown that the
robot succeeded in placing the unit at an appropriate location to share the
information indicating that a dead end exists. (Author abstract) 8 Refs.
   Descriptors: *Mobile robots; Knowledge based systems; Data storage
equipment; Information management; Robustness (control systems);
Distributed computer systems
   Identifiers: Omnidirectional mobile robots; Intelligent data carriers;
Distributed autonomous robotic systems; Multirobot systems; Forklift
mechanisms
   Classification Codes:
   723.4.1 (Expert Systems)
   731.5 (Robotics); 723.4 (Artificial Intelligence); 722.1 (Data
Storage, Equipment & Techniques); 723.2 (Data Processing); 731.1 (Control
Systems); 722.4 (Digital Computers & Systems)
   731 (Automatic Control Principles); 723 (Computer Software); 722
(Computer Hardware)
   73 (CONTROL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING)

43/5/14   (Item 14 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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04496264   E.I. No: EIP96093329712
    Title: **Physical layer design alternatives for outdoor high speed wireless**
local area network
    Author: Trabelsi, Chokri; Torun, Erdal
    Corporate Source: Communications Research Cent, Ottawa, Ont, Can
    Conference Title: Proceedings of the 1996 IEEE International Conference
on Communications, ICC'96. Part 2 (of 3)
    Conference Location: Dallas, TX, USA   Conference Date: 19960623-19960627
    Sponsor: IEEE
    E.I. Conference No.: 45274
    Source: IEEE International Conference on Communications v 2 1996. IEEE,
Piscataway, NJ, USA,96CB35916. p 857-861
    Publication Year: 1996
    CODEN: 002115
    Language: English
    Document Type: CA; (Conference Article)   Treatment: T; (Theoretical)
    Journal Announcement: 9611W1
    Abstract: In the last few years, the development of wireless local area
networks (WLANs) has become a major **goal** in the **computer** and **wireless**
 communications field. The Network Technologies Research group at the
Communications Research Centre (CRC) in Canada is working on a project to
develop a high speed outdoor WLAN. In contrast to **many** existing WLANs,
the **new** WLAN supports multimedia traffic such as voice, data and video;
and will be used mainly in outdoor environment with a range of 20 to 30 km.
In this paper the physical layer design alternatives for the WLAN with a
speed of 10 to 20 Mbps are described. Simulation results for some of the
proposed techniques to be used for the WLAN system are presented. (Author
abstract) 10 Refs.
    Descriptors: Local area networks; Radio **communication** ; Voice/data
communication systems; Telecommunication traffic; Computer simulation;
Electric network topology; **Communication** channels (information theory);
Fading (radio); Intersymbol interference; Bit error rate
    Identifiers: Wireless **communications** ; Multimedia traffic; Frequency
band; Quadrature amplitude modulation
    Classification Codes:
    716.3 (Radio Systems & Equipment); 716.1 (Information & Communication
Theory); 723.5 (Computer Applications); 723.1 (Computer Programming);
921.6 (Numerical Methods)
    716 (Radar, Radio & TV Electronic Equipment); 723 (Computer Software);
921 (Applied Mathematics)
    71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING); 92
(ENGINEERING MATHEMATICS)

43/5/15   (Item 15 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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04278700   E.I. No: EIP95102904861
    Title: **Improving software process to implement a wireless mobile network**
    Author: Gibson, Kimberly A.
    Corporate Source: Motorola Government and Space Technology Group,
Scottsdale, AZ, USA
    Conference Title: Proceedings of the 19th Annual International Computer
Software and Applications Conference COMPSAC '95
    Conference Location: Dallas, TX, USA   Conference Date: 19950809-19950811
    Sponsor: IEEE
    E.I. Conference No.: 43840
    Source: Proceedings - IEEE Computer Society's International Computer
Software & Applications Conference 1995. IEEE, Los Alamitos, CA,
USA,95CB35838. p 91-92
    Publication Year: 1995

Abstract: Software engineering activities are performed and documented in
segments with little automatic flowthrough of **information** . This
segmented approach impedes the progress to a working understandable
system. Since the best efforts fail to **keep** the documentation up-to-date
as the software changes during implementation and testing, the product is
difficult to maintain and impossible to understand. This manual process of
software engineering must be changed to automate repetitive tasks and
remove opportunities for human error. A wireless, mobile networks
application is used to illustrate the improvements in the process that will
lead to an effective implementation of such complicated distributed
systems.
   Descriptors: Software engineering; **Mobile** radio systems; **Computer**
networks; Computer architecture; Knowledge based systems; Distributed
computer systems; Computer software selection and evaluation; Large scale
systems; Program documentation
   Identifiers: Software development processes
   Classification Codes:
   723.4.1 (Expert Systems)
   723.5 (Computer Applications); 716.3 (Radio Systems & Equipment); 722.2
   (Computer Peripheral Equipment); 722.4 (Digital Computers & Systems);
723.1 (Computer Programming); 723.4 (Artificial Intelligence)
   723 (Computer Software); 716 (Radar, Radio & TV Electronic Equipment);
722 (Computer Hardware)
   72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS)

   43/5/16   (Item 16 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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04144568   E.I. No: EIP95042671631
   Title: **Coordinating motion of cooperative mobile robots through visual
observation**
   Author: Marapane, Suresh B.; Holder, Martin; Trivedi, Mohan M.
   Corporate Source: Univ of Tennessee - Knoxville, Knoxville, TN, USA
   Conference Title: Proceedings of the 1994 IEEE International Conference
on Systems, Man and Cybernetics. Part 3 (of 3)
   Conference   Location: San   Antonio,   TX,   USA   Conference   Date:
19941002-19941005
   E.I. Conference No.: 42882
   Source: Proceedings of the IEEE International Conference on Systems, Man
and Cybernetics v 3 1994.,94CH3571-5. p 2260-2265
   Publication Year: 1994
   CODEN: PICYE3
   Language: English
   Document Type: CA; (Conference Article)   Treatment: T; (Theoretical)
   Journal Announcement: 9506W3
   Abstract: In applications where **multiple** robot teams are deployed the
motion of each robot must be coordinated with the rest of the robots. This
paper describes the development of an integrated autonomous multi-robot
system, where two heterogeneous robots exhibit coordinated convoying
behavior. Coordination is accomplished without any communication but by
visual observation. An active perception system uses visual servoing to
track the leading vehicle to **determine** it's heading and relative
distance. A fuzzy logic based real-time motion controller uses the heading
to control the steering and relative distance and velocity information to
adjust the speed to let the trailing robot smoothly follow the leader. A
novel correlation algorithm based on Minimum Noise and Correlation Energy
(MINACE) filter is used for object tracking. The MINACE based tracker is
adaptive and when the tracking degrades due to the **change** in appearance
of the leading robot a **new** filter is synthesized on line to replace the
old one. The performance and robustness of the convoying system has been
verified in a series of extensive laboratory trials. (Author abstract) 20

Descriptors: **Mobile** robots; **Computer** vision; Fuzzy sets; Motion control; Steering; Velocity; Speed; Algorithms; Correlation methods; Adaptive control systems
Identifiers: Coordinating motion; Visual observation; Fuzzy logic based real **time** motion controller; **Minimum** noise and correlation energy
Classification Codes:
731.5 (Robotics); 723.5 (Computer Applications); 921.4 (Combinatorial Mathematics, Includes Graph Theory, Set Theory); 731.3 (Specific Variables Control); 723.1 (Computer Programming); 922.2 (Mathematical Statistics)
731 (Automatic Control Principles); 723 (Computer Software); 921 (Applied Mathematics); 922 (Statistical Methods)
73 (CONTROL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS)

43/5/17 (Item 17 from file: 8)

03600907 E.I. Monthly No: EI9305064934
Title: High-accuracy wavefront tracing traveltime calculation.
Author: Coultrip, Robert L.
Corporate Source: Univ of California, Irvine, CA, USA
Source: Geophysics v 58 n 2 Feb 1993 p 284-292
Publication Year: 1993
CODEN: GPYSA7 ISSN: 0016-8033
Language: English
Document Type: JA; (Journal Article) Treatment: T; (Theoretical)
Journal Announcement: 9305
Abstract: Conventional ray-tracing algorithms for first-arrival calculation suffer from drawbacks such as (1) no guarantee of finding the globally minimum traveltime path when **multiple** paths exist, (2) shadow zones, and (3) trouble finding minimum traveltime paths containing refraction and/or diffraction energy. Algorithms that trace wavefronts circumvent these problems. A **new** wavefront-tracing algorithm is presented which is based on an earth model consisting of uniform-velocity triangular cells with nodes placed at vertices and along **cell** edges. **Nodes** are places where traces of first arrival wavefronts (propagation directions and arrival times) are stored. The algorithm works by propagating wavefronts (sampled at the nodes) away from the source throughout the entire model. Wavefronts are propagated locally as diffraction, direct arrival, or critically refracted energy that implicitly describe **minimum time** paths. Once the first arrival wavefront is sampled throughout the model, traveltimes and raypaths from the source to receivers are easily calculated. This algorithm computes the globally **minimum time** paths from the source to all points in the model regardless of model complexity and the number of locally minimum traveltime paths. Traveltime calculations are highly accurate and computation time is $O(n \log//2 n)$ for n nodes. Use of triangular cells allows for cell boundaries that follow, say, fault planes and dipping beds, without resorting to stair-step approximations inherent with rectangular cells. This method can be extended to three-dimensional problems. (Author abstract) 12 Refs.
Descriptors: *PETROLEUM PROSPECTING; SEISMIC PROSPECTING; ACOUSTIC WAVE VELOCITY; DATA PROCESSING; GEOMETRICAL OPTICS; ALGORITHMS; MATHEMATICAL MODELS
Identifiers: SEISMIC WAVE TRAVELTIME MODELING; SEISMIC WAVEFRONT TRACING ALGORITHMS; MINIMUM TRAVELTIME PATH **DETERMINATION** ; TRIANGULAR CELL EARTH MODELS; UNIFORM-VELOCITY TRIANGULAR CELLS; FORWARD MODELING METHODS
Classification Codes:
512 (Petroleum & Related Deposits); 481 (Geology & Geophysics); 751 (Acoustics); 723 (Computer Software); 921 (Applied Mathematics)
51 (PETROLEUM ENGINEERING); 48 (ENGINEERING GEOLOGY); 75 (ACOUSTICAL TECHNOLOGY); 72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS)

01847793 ORDER NO: AADAA-I3022567
Design and power optimization techniques of CMOS baseband circuits for wideband wireless applications
    Author: Shi, Chunlei
    Degree: Ph.D.
    Year: 2001
    Corporate Source/Institution: The Ohio State University (0168)
    Adviser: Mohammed Ismail
    Source: VOLUME 62/08-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
             PAGE 3744. 155 PAGES
    Descriptors: ENGINEERING, ELECTRONICS AND ELECTRICAL
    Descriptor Codes: 0544
    ISBN: 0-493-34209-5

    The wireless **communication** market has been experiencing tremendous growth and will continue to do so in the next decade. It leads to a high demand for low-power, low-cost, small form factor **devices** . The **objective** of this work is to investigate **new** circuit techniques to design low-power/low-voltage CMOS analog/mixed-signal baseband circuits (data converters, filters, etc) for various wireless applications such as WCDMA, WLAN, Bluetooth, HomeRF, etc.
    Reducing power dissipation associated with high speed sampling and quantization is a major problem in A/D converter (ADC) design. **Several** power optimization techniques used in pipeline ADCs are first analyzed, then a novel technique named dynamic biasing is proposed. An experimental prototype ADC for WLAN (DSSS)/WCDMA direct conversion receivers was designed and fabricated in a 0.5μ<italic>m</italic> CMOS technology. This technique can also be applied to other receiver/ADC architectures.
    A novel technique to improve the intrinsic matching of resistor-string D/A converters (DACs) without trimming or calibration is proposed. This technique is demonstrated in the design of a high-resolution control DAC for 3G (UTMS) transceivers.
    Low voltage operation is another important key factor in these **portable** **devices** . Based on the study of low voltage circuit design techniques, a **modified** switched-opamp technique suitable for system-on-chip design is proposed. The major novelty and improvement is that it increases the maximum sampling frequency, and employs a novel input stage. A 1.5V 8-bit 20MS/s pipeline ADC was designed and implemented in a 0.18μ<italic>m</italic> CMOS technology for Bluetooth/WLAN(FHSS)/HomeRF applications.
    In modern wideband receivers, the analog filter often consumes a large portion of power. Therefore, the design of low-power high-speed active filters will have a significant contribution to the power savings of the entire receiver. A novel fully-differential active filter architecture is developed. It employs only a single active component (DDA) to implement a second-order Sallen-Key filter. A fifth-order low-pass filter was designed and fabricated in a 0.5μ<italic> m</italic> CMOS technology. This filter exhibits high speed, high linearity, low noise and low power.

01843176 ORDER NO: AADAA-I3022789
Routing in the Internet using partial **link state** information
    Author: Spohn, Marcelo
    Degree: Ph.D.
    Year: 2001
    Corporate Source/Institution: University of California, Santa Cruz (0036
)
    Chair: J. J. Garcia-Luna-Aceves
    Source: VOLUME 62/07-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

This thesis focuses on routing in wired and wireless segments of the
Internet using **partial** link-state **information** . Although efficient
algorithms have been proposed based on both link-state and distance-vector
information, link-state routing is more efficient than distance-vector
routing when constraints are placed on the paths offered to destinations,
which is the case for QoS routing offering paths with required delay,
bandwidth, reliability, cost, or other parameters.

We present a new link-state routing protocol for wired internetworks
called ALP (adaptive link-state protocol). In ALP, a router sends updates
to its neighbors regarding the links in its preferred paths to
destinations. Each router decides which links to report to its neighbors
based on its local computation of preferred paths. A router running ALP
does not ask its neighbors to delete links; instead, a router simply
updates its neighbors with the most recent information about those links it
decides to take out of its preferred paths.

We introduce and analyze two routing algorithms for wireless networks:
the source-tree adaptive routing (STAR) protocol, and the
neighborhood-aware source routing (NSR) protocol. STAR is the first example
of a table-driven routing protocol that is more efficient than prior
table-driven and on-demand routing protocols by exploiting link-state
information to allow paths taken to destinations to deviate from the
optimum in order to **save** bandwidth without creating loops. NSR is an
on-demand routing protocol based on **partial** topology **information** and
source routing. STAR is shown to be more efficient than the dynamic source
routing (DSR) protocol in small ad hoc networks, and NSR is shown to
outperform STAR and DSR in large wireless networks with **mobile   nodes** .

In the client-server based systems, data is cached at clients to
improve the performance. When data items are **updated** at the server,
inconsistency arises among these copies. Maintaining consistency is one of
the major issues in these systems. This problem is more complicated in
mobile systems because of the low bandwidth and asymmetric wireless
channels, and the mobile and resource poor **clients** . The **objective** of
this research is to study various issues associated with maintaining
consistency in the mobile systems.

In some applications, the wireless channels are treated as one-way
broadcast channels to improve the scalability. In these channels, the
clients do not **send** requests to the server. The server continuously
broadcasts the data over the channel. The clients listen to the channel and
access the required data whenever it is broadcast. To improve the
performance, the clients cache data. Consistency problems arise when the
data is **updated** at the server. Two schemes, immediate propagation scheme
and invalidation scheme, are used in the traditional systems. The
performance of these schemes in the one-way broadcast channels is analyzed.

Many other issues ⬤ise while using these schemes ⬤this
environment. Some of these issues, like missing **updates** , effect on the
tuning time and tolerating **communication** errors, are discussed.
     The mobility of clients is another parameter that affects consistency
and performance in distributed systems. In distributed systems, data is
often replicated at **multiple** servers. Data copies at these servers are
periodically synchronized to reduce the **communication** overhead. But, in a
 mobile system, a **client** often moves from place to place. If the servers
are not in consistent state, it has to access from the previous server,
which incurs a high **communication** cost. An optimal period of
synchronization which depends on the mobility rate of clients is
calculated. Similarly, various schemes that are used to improve the data
access time of a **mobile** **client** are analyzed.

     43/5/21   (Item 4 from file: 35)

01439526 ORDER NO: AADAA-I9533659
A SYSTEM ARCHITECTURE FOR CONTEXT-AWARE MOBILE COMPUTING (PDA)
  Author: SCHILIT, WILLIAM NOAH
  Degree: PH.D.
  Year: 1995
  Corporate Source/Institution: COLUMBIA UNIVERSITY (0054)
  Sponsor: DANIEL DUCHAMP
  Source: VOLUME 56/06-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
           PAGE 3300. 144 PAGES
  Descriptors: COMPUTER SCIENCE
  Descriptor Codes: 0984

     Computer applications traditionally expect a static execution
environment. However, this precondition is generally not possible for
mobile systems, where the world around an application is constantly
changing. This thesis explores how to support and also exploit the dynamic
configurations and social settings characteristic of mobile systems. More
specifically, it advances the following goals: (1) enabling seamless
interaction across devices; (2) creating physical spaces that are
responsive to users; and (3) and building applications that are aware of
the context of their use. Examples of these goals are: continuing in your
office a program started at home; using a PDA to control someone else's
windowing UI; automatically canceling phone forwarding upon return to your
office; having an airport overhead-display highlight the flight information
viewers are likely to be interested in; easily locating and using the
nearest printer or fax machine; and automatically turning off a PDA's
audible e-mail notification when in a meeting.
     The contribution of this thesis is an architecture to support
context-aware computing; that is, application adaptation triggered by such
things as the location of use, the collection of nearby people, the
presence of accessible devices and other kinds of objects, as well as
changes to all these things over time. Three key issues are addressed: (1)
the information needs of applications, (2) where applications get various
pieces of **information** and (3) how information can be efficiently
distributed.
     A dynamic environment communication model is introduced as a general
mechanism for quickly and efficiently learning about **changes** occurring in
the environment in a fault tolerant manner. For purposes of scalability,
multiple dynamic environment servers **store** user, device, and, for each
geographic region, context information. In order to efficiently disseminate
information from these components to applications, a dynamic collection of
multicast groups is employed. The thesis also describes a demonstration
system based on the Xerox PARCTAB, a **wireless** palmtop **computer** .

     43/5/22   (Item 1 from file: 2)

7644901   INSPEC Abstract Number: B2003-07-6210L-053, C2003-07-5620L-010
   Title: **Forwarding data bases and ad-hoc routing techniques for nested clusters of wireless LANs**
   Author(s): Elhakeern, A.K.; Ali, S.M.; Aquil, F.; Zhening Li; Zaidi, S.R.A.
   Author Affiliation: Dept. of Electr. & Comput. Eng., Concordia Univ., Montreal, Que., Canada
   Conference Title: Wireless 2001. 13th International Conference on Wireless Communications. Proceedings   Part vol.1   p.161-78 vol.1
   Publisher: TRLabs/Univ. Calgary, Calgary, Alta., Canada
   Publication Date: 2001 Country of Publication: Canada   2 vol.641 pp.
   Material Identity Number: XX-2003-01706
   Conference Title: Wireless 2001. 13th International Conference on Wireless Communications. Proceedings
   Conference Date: 9-11 July 2001   Conference Location: Calgary, Alta., Canada
   Language: English   Document Type: Conference Paper (PA)
   Treatment: Theoretical (T); Experimental (X)
   Abstract: There have been growing interest in providing mobile users traversing nested wireless LANs with free roaming and minimum call blocking. Existing IEEE 802.11 based wireless LANs have minimal capabilities when it comes providing wireless connectivity among neighboring wireless LANs segments. Many such LANs segments may be interconnected by means of a terrestrial Ethernet or other networks utilizing the standard access point mode of operation (AP). However, such connectivity is lacking within the IEEE 802.11 ad-hoc mode. In the later users establish peer-to-peer communications without seeking the help of a central station (AP). One can envision that the distributed ad-hoc mode will be adopted by the multivendor multidesign based deployment of such nested LANs. This will make the need for efficient routing of users messages by wireless means even greater. For mobile users, faster roaming, between the microcells of the nested wireless LANs should lead to devising new routing techniques to withstand the deep fading, and propagation path losses in the GHz regions where these LANs operate. We introduce and evaluate the performance of a new GPS based adaptive routing technique. The new routing technique uses the GPS location and timing information assumed available at all wireless nodes for minimizing the number or wireless segments and the number of duplicate messages a certain TPDU faces and generates enroute to the destination node . Miscellaneous dynamic scenarios involving users mobilities, fading, congestion and multi media traffic variations are considered. Accurate GPS timing and location information could be also substituted by other terrestrial means, and for both cases we investigate the performance of other routing techniques where some of this information is missing. We also present simulation results of a limited flooding technique that does not require GPS information. (19 Refs)
   Subfile: B C
   Descriptors: ad hoc networks; database management systems; Global Positioning System; IEEE standards; land mobile radio; performance evaluation; telecommunication network routing; telecommunication standards; telecommunication traffic; wireless LAN
   Identifiers: forwarding data bases; ad-hoc routing; nested WLAN clusters; IEEE 802.11 wireless LAN; nested wireless LAN; terrestrial Ethernet; access point mode of operation; IEEE 802.11 ad-hoc mode; peer-to-peer communications ; distributed ad-hoc mode; mobile users; roaming; microcells ; deep fading; propagation path loss; performance evaluation; GPS based adaptive routing; GPS location information; GPS timing information; wireless nodes ; fading; congestion; multimedia traffic variations; simulation results; limited flooding technique; TPDU
   Class Codes: B6210L (Computer communications); B6250F (Mobile radio systems); B6250G (Satellite communication systems); B6330 (Radionavigation and direction finding); B6150P (Communication network design, planning and routing); C5620L (Local area networks); C5670 (Network performance)

7026971   INSPEC Abstract Number: B2001-10-6150M-094, C2001-10-5640-065
   **Title: Urban   community information system using simple infrared
broadcasting telecommunication protocol**
   Author(s): Ichioka, Y.; Aoki, T.; Yasuda, H.
   Author Affiliation: Res. Center for Adv. Sci. & Technol., Tokyo Univ.,
Japan
   Journal: Transactions of the Institute of Electronics, Information and
Communication Engineers B   vol.J84-B, no.7   p.1299-310
   Publisher: Inst. Electron. Inf. & Commun. Eng,
   Publication Date: July 2001 Country of Publication: Japan
   CODEN: DJTBEU ISSN: 0913-5715
   SICI: 0913-5715(200107)J84B:7L.1299:UCIS;1-4
   Material Identity Number: K839-2001-008
   Language: Japanese   Document Type: Journal Paper (JP)
   Treatment: Practical (P)
   Abstract: This paper proposes a **new** architecture for an information
delivery system that can support the life and activities of people at
crowded places in metropolitan areas, and addresses a simple infrared
broadcasting   protocol.   The   proposed   architecture   has
two-hierarchical-server structure to reduce server load. Consistency
against frequent **update** of **information** is kept by **version** management.
Classifying distributed information into two groups: "content to show" and
"content to go" makes it possible for the receiver to carry retrieved
information with his/her **mobile   terminal** . The implemented simple
infrared broadcasting can give a solution to the congestion issue caused by
many receivers' **multiple** accesses for retrieval. (19 Refs)
   Subfile: B C
   Descriptors: configuration management; information retrieval systems;
mobile computing; optical communication; protocols; public information
systems
   Identifiers: urban community information system; infrared broadcasting
protocol; two-hierarchical-server structure; **mobile   terminal** ; retrieved
information
   Class Codes: B6150M (Protocols); B6260 (Optical communication); C5640 (
Protocols); C7250 (Information storage and retrieval); C7100 (Business
and administration)

7001164   INSPEC Abstract Number: B2001-09-6210L-081, C2001-09-5620W-041
   Title: Migrating to a mobile architecture
   Author(s): Hobbs, M.T.
   Journal: WEB Techniques   vol.6, no.6   p.42-7
   Publisher: CMP Media Inc,
   Publication Date: June 2001 Country of Publication: USA
   CODEN: WETEFA ISSN: 1086-556X
   SICI: 1086-556X(200106)6:6L.42:MMA;1-V
   Material Identity Number: F184-2001-005
   Language: English   Document Type: Journal Paper (JP)
   Treatment: Practical (P)
   Abstract: Now that the Internet is nearing ubiquity with its massive
stores of digitized content, and now that we're simultaneously seeing
explosive growth in the use of **mobile   devices** , it's a natural leap to
consider the convergence of the two in the form of the wireless Web.
Indeed, as mobile networks improve speed and data integrity, and lower
costs, it makes sense to take advantage of the rich **store** of data on the
Web and make it available to anyone with a **mobile   device** . It's time to
get serious about letting your employees and **partners** access critical
enterprise **data** anywhere, anytime. The author shows you where to start.

    Subfile: B C
    Descriptors: Internet; mobile computing; mobile radio
    Identifiers: digitized content; **mobile devices** ; wireless Web; mobile
networks; critical enterprise data
    Class Codes: B6210L (Computer communications); B6250F (Mobile radio
systems); C5620W (Other computer networks)
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43/5/25   (Item 4 from file: 2)
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6946219   INSPEC Abstract Number: C2001-07-7100-034
 Title: **Taking intelligence on the road [mobile GIS application]**
    Author(s): Cutlip, R.
    Journal: DB2 Magazine   vol.6, no.2   p.24-31
    Publisher: Miller Freeman,
    Publication Date: 2001   Country of Publication: USA
    CODEN: DBMAF5
    Material Identity Number: G132-2001-002
    Language: English   Document Type: Journal Paper (JP)
    Treatment: Applications (A); Practical (P)
    Abstract: Pervasive computing is about enabling access through the
integration of technologies. It's about using an evolving class of
intelligent and **portable devices** to enable personal and professional
transactions that simplify work and home lives. Among the most important
innovations is the **partnering** of geographic **information** systems (GISs)
with PDAs. Today GIS technology is increasingly integrated with
object/relational databases for use in data warehousing and other business
intelligence (BI) efforts. You can use DB2 Spatial Extender to create GISs,
a development I took advantage of in a prototype solution that uses the DB2
Everyplace database engine on a PDA using a wireless network. This solution
enables two tasks often required by mobile professionals: querying against
the database on the handheld device, and connecting to specialized
applications through the Internet. I walk you through the solution
architecture and, in the process, shed light on implementation
considerations you should **keep** in mind when incorporating pervasive
solutions into your business. (0 Refs)
    Subfile: C
    Descriptors: business data processing; geographic information systems;
Internet; mobile computing; relational databases
    Identifiers: pervasive computing; geographic information systems; PDAs;
data warehousing; business intelligence; DB2 Spatial Extender; DB2
Everyplace database engine; wireless network; handheld device; Internet;
solution architecture
    Class Codes: C7100 (Business and administration); C6160S (Spatial and
pictorial databases); C7210N (Information networks); C6160D (Relational
databases); C7840 (Geography and cartography computing)
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43/5/26   (Item 5 from file: 2)
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6766306   INSPEC Abstract Number: B2001-01-6150M-001, C2001-01-5640-002
    Title: **The implication of the next-generation wireless network design:
cellular mobile IPv6**
    Author(s): Han-Chieh Chao; Yen-Ming Chu; Mu-Tai Lin
    Author Affiliation: Dept. of Electr. Eng., Nat. Dong Hwa Univ., Taiwan
    Journal: IEEE Transactions on Consumer Electronics Conference Title: IEEE
Trans. Consum. Electron. (USA)   vol.46, no.3   p.656-63
    Publisher: IEEE,
    Publication Date: Aug. 2000 Country of Publication: USA
    CODEN: ITCEDA ISSN: 0098-3063

Conference Title: 2000 Digest of Technical Papers. International Conference on Consumer Electronics. Nineteenth in the Series
Conference Sponsor: Consumer Electron. Soc
Conference Date: 13-15 June 2000   Conference Location: Los Angles, CA, USA
Language: English   Document Type: Conference Paper (PA); Journal Paper (JP)
Treatment: Applications (A); Practical (P)

Abstract: The initiatives to add mobility to the Internet and packet **data** services for next-generation cellular systems are being considered by **many** mobile service providers. IPv6 is a **new** **version** of the Internet protocol that was standardized by the Internet Engineering Task Force (IETF). It supports mobility and is presently being standardized by the IETF Mobile IP Working Group. At the same time, cellular is an inevitable and developing architecture for the Personal Communication Service system (PCS). In this paper, cellular mobile IPv6 (CMI), a **new** algorithm that is migrated from mobile IPv6 is proposed for **mobile nodes** moving among small wireless cells at high speed. It is important for future mobile communication environments and should eventually, integrate its functions with the Internet. The purpose of this paper is to solve the problems of a communication break within smaller cellular coverage during high-speed movement with packet-switched data or the real-time voice messages. Thus, voice over IP (VoIP) packets were chosen to implement the system. Simulation results show smooth and non-breaking handoff during high-speed movement using the proposed algorithm. (14 Refs)
Subfile: B C
Descriptors: cellular radio; Internet telephony; packet radio networks; standardisation; transport protocols
Identifiers: cellular mobile IPv6; next-generation wireless network design; packet data services; cellular systems; mobile service providers; Internet protocol; Internet Engineering Task Force; IETF; standardization; Personal Communication Service system; PCS; **mobile nodes** ; wireless cells; cellular coverage; high-speed movement; packet-switched data; real-time voice messages; voice over IP packets; VoIP packets; simulation results; nonbreaking handoff; smooth handoff
Class Codes: B6150M (Protocols); B6250F (Mobile radio systems); B6210D (Telephony); B6210L (Computer communications); C5640 (Protocols); C5620W (Other computer networks)

43/5/27   (Item 6 from file: 2)

6727747   INSPEC Abstract Number: B2000-11-6150M-109
Title: On-demand QoS-based routing protocol for ad hoc mobile wireless networks
Author(s): Ying-Kwei Ho; Ru-Sheng Liu
Author Affiliation: Dept. of Comput. Eng. & Sci., Yuan-Ze Inst. of Technol., Chungli, Taiwan
Conference Title: Proceedings ISCC 2000. Fifth IEEE Symposium on Computers and Communications   p.560-5
Editor(s): Tohme, S.; Ulema, M.
Publisher: IEEE Comput. Soc, Los Alamitos, CA, USA
Publication Date: 2000 Country of Publication: USA   xvi+808 pp.
ISBN: 0 7695 0722 0   Material Identity Number: XX-2000-01266
U.S. Copyright Clearance Center Code: 0 7695 0722 0/2000/$10.00
Conference Title: Proceedings of 5th IEEE Symposium on Computer and Communications (ISCC 2000)
Conference Sponsor: IEEE Commun. Soc.; IEEE Comput. Soc
Conference Date: 3-6 July 2000   Conference Location: Antibes-Juan les Pins, France
Language: English   Document Type: Conference Paper (PA)

Abstract: To explore QoS issue for ad hoc mobile wireless networks is not trivial because of the high mobility of **mobile nodes** . Based an the DSDV (destination-sequenced distance-vector) routing protocol for maintaining up-to-date route information, previous works on QoS routing for ad hoc mobile wireless networks do require adding an extra bandwidth for exchanging QoS information. However the size and the **update** frequency of the routing table are increased tremendously with the number of **mobile nodes** . We propose an on-demand-based QoS routing protocol to achieve the QoS requirement. The goal of this paper is to discover an optimal route with minimum time delay for **transmitting** real-time data from a source node hop by hop to a **destination node** under some predefined constraints. (16 Refs)
Subfile: B
Descriptors: access protocols; land mobile radio; network topology; optimisation; quality of service; radio networks; telecommunication network routing; time division **multiple** access; transport protocols
Identifiers: on-demand QoS-based routing protocol; ad hoc mobile wireless networks; **mobile nodes** ; destination-sequenced distance-vector routing protocol; route information; bandwidth; QoS information exchange; **update** frequency; routing table size; optimal route; minimum time delay; real-time data transmission; source node; **destination node** ; wireless network topology; TDMA; simulation environment
Class Codes: B6150M (Protocols); B6150P (Communication network design, planning and routing); B6250F (Mobile radio systems); B0260 (Optimisation techniques)

43/5/28 		**(Item 7 from file: 2)**
DIALOG(R)File   -2:INSPEC
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6258727 	INSPEC Abstract Number: B1999-07-6250F-030
Title: **A distance routing effect algorithm for mobility (DREAM)**
Author(s): Basagni, S.; Chlamtac, I.; Syrotiuk, V.R.; Woodward, B.A.
Author Affiliation: Sch. of Eng. & Comput. Sci., Texas Univ., Dallas, TX, USA
Abstract: In this paper we introduce a **new** routing protocol for ad hoc networks built around two novel observations. One, called the distance effect, uses the fact that the greater the distance separating two nodes, the slower they appear to be moving with respect to each other. Accordingly, the location information in routing tables can be **updated** as a function of the distance separating nodes without compromising the routing accuracy. The second idea is that of triggering the **sending** of location **updates** by the moving nodes autonomously, based only on a node's mobility rate. Intuitively, it is clear that in a directional routing algorithm, routing information about the slower moving nodes needs to be **updated** less frequently than that about highly **mobile nodes** . In this way each node can optimize the frequency at which it **sends updates** to the networks and correspondingly reduce the bandwidth and energy used, leading to a fully distributed and self-optimizing system. Based on these routing tables, the proposed directional algorithm **sends** messages in the "recorded direction" of the **destination node** , guaranteeing delivery by following the direction with a given probability. We show by detailed

'simulation that our p●ocol always delivers more th●80% of the data messages by following the direction computed, without u~ing any recovery procedure. In addition, it minimizes the overhead used for maintaining routes using the two **new** principles of **update** message frequency and distance. Lastly, the algorithm is fully distributed, provides loop-free paths, and is robust, since it supplies **multiple** routes. (12 Refs)
 Subfile: B
 Descriptors: distributed algorithms; mobile radio; packet radio networks; protocols; table lookup; telecommunication network routing
 Identifiers: distance routing effect algorithm for mobility; DREAM; routing protocol; ad hoc networks; location information; routing tables; mobility rate; directional routing algorithm; fully distributed self-optimizing system; **destination** **node** ; recovery procedure; **update** message frequency; loop-free paths; **multiple** routes; packet radio network
 Class Codes: B6250F (Mobile radio systems); B6150P (Communication network design, planning and routing); B6150M (Protocols)
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43/5/29 **(Item 8 from file: 2)**
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5616634 INSPEC Abstract Number: B9708-0170J-042, C9708-5490-001
 Title: **Thermal modeling of high performance packages in** portable computers
 Author(s): Ram Viswanath; Ali, I.A.
 Author Affiliation: Intel Corp., Chandler, AZ, USA
 Journal: IEEE Transactions on Components, Packaging, and Manufacturing Technology, Part A vol.20, no.2 p.230-40
 Publisher: IEEE,
 Publication Date: June 1997 Country of Publication: USA
 CODEN: IMTAEZ ISSN: 1070-9886
 SICI: 1070-9886(199706)20:2L.230:TMHP;1-8
 Material Identity Number: B480-97003
 U.S. Copyright Clearance Center Code: 1070-9886/97/$10.00
 Document Number: S1070-9886(97)03600-7
 Language: English Document Type: Journal Paper (JP)
 Treatment: Practical (P) ; Theoretical (T); Experimental (X)
 Abstract: An experimental and numerical study was conducted to determine the thermal performance of the Pentium(R) Processor in a tape carrier package (TCP) operating inside a typical **portable** **computer** . The **objective** of this study is to develop a validated system level model of the portable environment and demonstrate that equipment designers can carry out design iterations of possible heat **transfer** configurations to analyze cost, performance, and manufacturability tradeoffs. A detailed three-dimensional (3-D) numerical model of the package was constructed using a computational fluid dynamic software. In the interest of keeping the computational model tractable, some simplifying assumptions were employed to obtain equivalent compact models of the various components in the computer. The fluid motion is essentially a buoyancy driven convection inside an enclosure with **multiple** discrete heat sources. An experimental study was conducted to validate the numerical model. The results obtained indicate that the model is in good agreement with the experimental data, both qualitatively and quantitatively. Subsequent design iterations were conducted and thermal performance limits were established for various package families. The validated model was used to investigate design **modifications** to improve thermal performance through increased printed circuit board (PCB) thermal conductivity and the inclusion of heat spreaders, heat pipes, and vented enclosures. (15 Refs)
 Subfile: B C
 Descriptors: heat pipes; integrated circuit modelling; integrated circuit packaging; iterative methods; natural convection; **portable** **computers**
 Identifiers: thermal modeling; packages; **portable** **computers** ; tape carrier package; system level model; design iterations; heat **transfer** configurations; 3D numerical model; computational fluid dynamics software; buoyancy driven convection; **multiple** discrete heat sources; PCB thermal

conductivity; heat sprea●s; heat pipes; vented enclosu●
 Class Codes: B0170J (Product packaging); B0290F (Interpolation and
function approximation); C5490 (Other aspects of analogue and digital
computers); C4130 (Interpolation and function approximation)
 Copyright 1997, IEE

 43/5/30   (Item 9 from file: 2)
DIALOG(R)File   2:INSPEC

4814214   INSPEC Abstract Number: B9412-1265Z-007, C9412-5610P-004
 Title: **Smart controllers speed data moves, trim overheads**
 Author(s): Bursky, D.
 Journal: Electronic Design   vol.42, no.19   p.85-6, 88, 90, 94, 96,
98, 100, 102, 105-6
 Publication Date: 19 Sept. 1994 Country of Publication: USA
 CODEN: ELODAW ISSN: 0013-4872
 U.S. Copyright Clearance Center Code: 0013-4872/94/$2.00+1.00
 Language: English   Document Type: Journal Paper (JP)
 Treatment: Practical (P); Product Review (R)
Abstract: High-capacity small-format disk drives have evolved as an
essential part of every desktop and **portable computer** system, as well
as a key building **block** in network **file** servers and high-reliability
RAID (redundant array of independent disks) subsystems. However, although
the disk drives are generally able to **keep** pace with the capacity
demands, they are starting to lag behind in data-transfer rates. This
performance gap is becoming quite apparent as more graphics and multimedia
applications come on line. Makers of disk-controller ICs are responding to
the call with new generations of chips that not only accelerate the process
of data transfers, but also add new features to simplify the systems. The
author discusses a number of enhanced IDE and SCSI controllers offered by
various manufacturers. (0 Refs)
 Subfile: B C
 Descriptors: digital integrated circuits; magnetic disc storage;
peripheral interfaces
 Identifiers: smart controllers; small-format disk drives; network file
servers; high-reliability RAID subsystems; redundant array of independent
disks; high-capacity drives; data-transfer rates; disk-controller ICs; IDE
controllers; SCSI controllers
 Class Codes: B1265Z (Other digital circuits); C5610P (Peripheral
interfaces); C5320C (Storage on moving magnetic media); C5150 (Other
circuits for digital computers)

 43/5/31   (Item 10 from file: 2)
DIALOG(R)File   2:INSPEC

4540224   INSPEC Abstract Number: B9401-6210-026, C9401-7410F-049
 Title: **A distributed, object-oriented** communication **network simulation
testbed**
 Author(s): Corson, M.S.
 Author Affiliation: Dept. of Elecr. Eng., Maryland Univ., College Park,
MD, USA
 Conference Title: 1992 Winter Simulation Conference Proceedings (Cat.
No.92CH3202-9)   p.672-9
 Publisher: IEEE, New York, NY, USA
 Publication Date: 1992 Country of Publication: USA   xxx+1410 pp.
 ISBN: 0 7803 0798 4
 Conference Sponsor: IEEE; ASA; ACM; IIE; NIST; ORSA; TIMS; SCS
 Conference Date: 13-16 Dec. 1992   Conference Location: Arlington, VA,
USA
 Language: English   Document Type: Conference Paper (PA)
 Treatment: Practical (P)
Abstract: The distributed network simulation testbed is a research tool
designed to aid users in the modeling and performance analysis of

· **communication** protoc● The testbed can be used to m● **communication** networks consisting of mobile and/or immobile nodes **communicating** over broadcast and/or point-to-point channels. Its object-oriented design permits users to utilize previously developed modules and, when necessary, to derive **new** modules which are subsequently added to the testbed. The testbed, implemented in Sim++, can run either sequentially on a single processor or in parallel on **multiple multiple processors** . An **object** -oriented, graphical user interface allows users to monitor simulation progress for both demonstration and debugging and permits users to graphically construct network simulations from existing testbed components. (2 Refs)

    Subfile: B C
    Descriptors: digital simulation; distributed processing; object-oriented programming; protocols; telecommunication networks; telecommunications computing
    Identifiers: **mobile nodes** ; broadcast channels; parallel processing; object-oriented **communication** network simulation testbed; distributed network simulation testbed; research tool; modeling; performance analysis; **communication** protocols; immobile nodes; point-to-point channels; Sim++; sequentially; single processor; **multiple** processors; graphical user interface; demonstration; debugging
    Class Codes: B6210 (Telecommunication applications); B6150M (Protocols); C7410F (Communications); C6110J (Object-oriented programming); C6185 (Simulation techniques); C6155 (Computer communications software)

    43/5/32   (Item 1 from file: 233)
DIALOG(R)File 233:Internet & Personal Comp. Abs.
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00633511   01PIO6-132
    Working in sync
    Seymour, Jim
    PC Magazine , June 26, 2001 , v20 n12 p79, 1 Page(s)
    ISSN: 0888-8507
    Languages: English
    Document Type: Articles, News & Columns
    Geographic Location: United States ·
    COMPANY LINE column discusses the need to **keep** the corporate data on all the intermittently connected **wireless mobile devices** in sync. Notes that every **portable device** carried by company employees, such as hand-held computers, notebook **computers** , and **cell** phones, needs to reflect the same **current** version of corporate **information** . Reports that **part** of the dilemma is pure database management, such as determining which of the data from two sources is the correct one and the locking of fields and records when **multiple** users are trying to input data into the system at the same time. Cites the need for real-time updating of the business information that users rely on. Says that for relief, some are looking to the Bluetooth standard for very short-range automatic wireless communications. Notes that vendors are taking steps to address these problems. (MEM)
    Descriptors: Wireless Communication; Synchronization; Corporate Information; Mobile Computing; Information Management; Standards

    43/5/33   (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus
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05044326   JICST ACCESSION NUMBER: 02A0017943   FILE SEGMENT: JICST-E
An IP-based mobile access network taking advantages of the broadcasting functionality of PON.
YAMADA TAKAHIKO (1); LAMBERTSEN G (1)
(1) Ritsumeikan Univ., Fac. of Sci. and Eng.
Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku(IEIC Technical Report (Institute of Electronics, Information and Communication Enginners), 2001, VOL.101,NO.354(NS2001 126-133), PAGE.19-24, FIG.5, REF.4

ABSTRACT: The coming fourth generation mobile network is said to be an
    IP-based network to provide high speed **communications** to high-speed
    terminals. This paper presents an access network architecture for the
    fourth generation Mobile IP network taking advantages of PON (Passive
    Optical Network). FA (Foreign agent) situates in each centralized node
    where **many** OLTs (Optical Line Terminals) exist, and controls handoff
    in the area of 40km diameter. For the FA hand-off, an initial FA is
    anchored, and paths are extended to **new** FAs. In a FA, a virtual
    macro-cell is defined which consists of a group of neighboring
    micro-cells. In each virtual macro-cell, only a cell in which the
    target mobile node exists conducts IP-based wireless transmission
    to the **target mobile node** , though all micro-cells in the virtual
    macro-cell are ready to do it. The virtual macro-cell for a high-speed
    node is dynamically reallocated along the movement of the node. CDMA's
    soft handoff together with the dynamical virtual macro-cell allows
    continuous IP-based transportation even for a high-speed node. (author
    abst.)
DESCRIPTORS: cellular **communications** ; internet; multi-media; local loop;
    optical **communication** ; simultaneous transmission; interchangeability;
    link switching; service area; agent; traffic processing
IDENTIFIERS: call processing
BROADER DESCRIPTORS: mobile **communication** ; telecommunication; computer
    network; **communication** network; information network; network;
    information media; **communication** system; method; property; link
    operating; **communication** operation; operation(processing); switching
    and changing; switching; zone; treatment
CLASSIFICATION CODE(S): ND08030H; ND11010T

   43/5/34   (Item 2 from file: 94)

ABSTRACT: An optimistic data consistency model has been used to ensure data
    consistency and data utility in distributed systems. The authors
    proposed a **data** version management system based on the **version**
    vector for solving simultaneous **data updates** by **multiple** users
    and discovering **update** conflicts. This paper proposes a messaging
    management system based on the system and also its nomadic type system
    on top of it. A **mobile terminal** user connects to a messaging
    server, and **updates** its message of the terminal and the server with
    message data version management system based on the version vector.
    The messaging system supports the message operation in unconnected
    condition and the reflection of message operation in the next time for
    the infrastructure to ensure data consistency and utility. And
    efficient data **transfer** by the differential data **transfer** and user
    controlled synchronization are realized. In the evaluation of the

prototype system, it ⬤ able to confirm that CPU load ⬤mory
consumption is also lower, while confirming that the message **update**
latency for securing consistency is up to practical use. Also, it can
be said that the system is scalable, as the non-connection mode is
effective for mobaile terminal users, server connection for securing
data consistency is not concentrated to one location,network
occupation decreases by reducing user operation,and CPU/memory
consumption for the messaging control is not significant.
DESCRIPTORS: electronic mail; message **transmission** ; incommensurability;
    consistency(computer); mobile communication; synchronous control; data
    management; data **update** ; system evaluation; scalablity(computer
BROADER DESCRIPTORS: telecommunication; communication system; method;
    matching; property; control; management; renewal; evaluation;
    performance evaluation
CLASSIFICATION CODE(S): JC03000K; ND08030H

43/5/35   (Item 3 from file: 94)

 Mobile   computer .   Mobile   computer **"AMITY VP"**.
MIURA TOSHIHIRO (1); UCHIMURA MASAYUKI (1); FUKUNAGA MASATAKE (1); FURUUCHI
    KOJI (1)
(1) Mitsubishi Electric Corp.
ABSTRACT: In recent years, due to progress of technologies to achieve
    small, thin, and lightweight electronic devices and high-density
    mounting technology, ultra-small personal computers have been
    commercialized and wireless **communication** equipment, such as cellular
    telephone and PHS, and digital cameras are rapidly penetrating. Inline
    with the penetration of network infrastructure, mobile computing is
    becoming a hot issue. However, in reality, there are not so **many**
    cases that enterprises introduce **mobile** **computers** for business
    application. Mitsubishi Electric developed and commercialized AMITY
    small computer equipped with excellent pen-input functions **several**
    years age. Large screen and light weight are its features. Mitsubishi
    has constructed a system using AMITY as a small information terminal
    for support of sales works outside the office, customer treatment,
    storefront works, and maintenance works. In April 1997 Mitsubishi
    started sales of a **new** product AMITY VP which is expected to meet
    the requirements of enterprises wishing to introduce **mobile**
    computers for business application. Regarding application, support of
    sales works executed outside the office represents an over whelmingly
    large proportion in the market. Therefore, **targeting** a **mobile**
    computer which is easy for sales people to use, development of AMITY
    VP was focused on achievement of a screen which is easy to view
    outdoor, robust frame, reduced cost, improved performance and improved
    pen input usability. Development content on each item is introduced.
DESCRIPTORS: hand-held type; personal computer; **new** product; operating
    system; weight reduction; liquid crystal display; contrast; electric
    cabinet; miniaturization; cost reduction; three dimension; CAD;
    microprocessor; computer
BROADER DESCRIPTORS: portable type; type; digital computer; hardware;
    product; system program; computer program; software; **modification** ;
    display device; equipment; electric apparatus and parts; parts;
    reduction; variation; dimension; computer application; utilization;
    design; arithmetic processor
CLASSIFICATION CODE(S): JC04010C

2334526 H.W. WILSON RECORD NUMBER: BAST01042341
Play that mobile music
Swartz, Nikki;
Wireless Review v. 17 no22 (Nov. 15 2000) p. 40-2
DOCUMENT TYPE: Feature Article ISSN: 1099-9248 LANGUAGE: English
RECORD STATUS: Corrected or revised record

ABSTRACT: While **keeping** a close watch on the Napster debate,
wireless-service providers are planning for the future marriage of music
and wireless. Based on what is happening in Europe and Asia, it is
predicted that music and gaming will be 2 of the most important
applications of **wireless devices** when 3G technology finally arrives.
Already ring tones and logos for mobile phones have been offered to
subscribers as **part** of a **record** promotion. The new Virgin-branded
Samsung SGH-M100 mobile phone combines wireless and MP3 technology.

DESCRIPTORS: Electronic music; Mobile computing;

01485564 20010102774
Development of an augmentative portable **communication** device
(Entwicklung eines tragbaren Verstaerkungskommunikationssystems)
Cummings, JR; Akmaloni
Univ. of North Carolina, Chapel Hill, USA
RESNA 2000, Proc. of the RESNA 2000 Annual Conf., Technology for the New
Millenium, Orlando, USA, Jun 28-Jul 2, 20002000
Document type: Conference paper Language: English
Record type: Abstract
ISBN: 0-932101-42-9

ABSTRACT:
The purpose of this project design was to develop an augmentative **portable**
 communication **device** (APCD) for people who are unable to speak
intelligibly. Specifically the APCD was designed to be a wearable vest with
voice recording and playback capabilities. The particular APCD was
specifically designed for a fifteen-year-old boy named Travis who has
cerebral palsy. The battery-powered voice recorder and player unit is
located in the control box on the upper back of the vest, directly below
the collar. The control circuitry is enclosed in a modified commercial
polystyrene box. In addition to housing the circuitry, the box also
contains a 9 V battery, a microphone, a record switch, a LED indicator,
activation pad connector plugs, speaker connector plug and a ON/OFF switch.
The battery compartment is isolated from the main circuitry and is
accessible through a latch that is held in place by a single screw. The
integrated circuits inside the control box consists of a microchip audio
recorder/player, a microprocessor, and an audio amplifier. The ISD
ChipCorder was set to sample at 8 kHz, which gave this **particular** chip a
maximum **record** length of 60 seconds. The 60-second capacity was divided
into five spaces: four message spaces and a short space for a beep sound.
The beep sound is activated when the record session is longer than the
allocated space. The microprocessor is a stand-alone microprocessor that
has non-volatile memory to **store** its program. When the APCD is initially
turned on, the LED shines brightly for one second, this confirms that the
circuit has proper power. The speaker box located on the outside of the
vest was made with a commercial 4 Ohm round speaker. The speaker was
removed from its original housing and placed in a sturdy polystyrene box.
The box was modified to house a female phono connector and a strap holder
for a Velcro strap that connects the speaker to the vest. Between the

Speaker and the Audio am██fier there is a commercially a██lable volume
controller containing an 600 Ohm potentiometer, which was modified to match
the 4 Ohm speaker.
DESCRIPTORS: PORTABLE INSTRUMENTS; VEST; LIGHTWEIGHT DESIGN; DATA RECORDING
; ELECTRIC BATTERIES; CONTROL UNITS; POLYSTYRENE; MICROPHONES; LED DISPLAYS
; MICROPROCESSORS; COMPUTER CODES; LOUDSPEAKERS; COMMUNICATION SYSTEMS;
BIOMEDICAL DEVICES
IDENTIFIERS: Kommunikationshilfe; Mikrofon; Lautsprecher; Spracherkennung

43/5/38   (Item 1 from file: 583)
DIALOG(R)File 583:Gale Group Globalbase(TM)
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06588916
LG Telecom to launch PCS Data service
  SOUTH KOREA: LG TO DEBUT PCS DATA SERVICE
The Korea Herald (XBF)   19 Feb 1998 P.7
Language: ENGLISH

South Korea's LG Telecom will **release** a **new** service, the 019 PCS **Data**
 service, in March 1998 to enable its customers to **send** data from their
notebook PCs wireless using their PCS handsets. The PCS operator will be
the global first to provide wireless data service based on CDMA (code
division **multiple** access) cellular networks. Its subscribers can access
their company LAN, surf the Internet, log onto on-line services and **send**
and receive faxes without a modem. The service's maximum data rate of 14.4
kilobits per second (kbps) is fast enough for Internet surfing. The
operator will raise the data rate to 64 kbps in 1999. The carrier has made
its service available to Japanese visitors to South Korea by supplying 300
handsets to its Japanese partner SGAT Co. It intends to export its handsets
to telecom operators in Hong Kong and Singapore so that they can lease
handsets to their customers visiting South Korea.

COMPANY: SGAT; INTERNET; LG TELECOM
PRODUCT: Laptop **Computers** (3573LC); Cellular Radio Services (4811CR);
    Telecommunications (4810); Cellular Radio Equipment (3662CE);
EVENT: Foreign Trade (64); Planning & Information (22);
COUNTRY: Singapore (9SIN); Hong Kong (9HON); Japan (9JPN); South Korea (
9SOK);

43/5/39   (Item 2 from file: 583)
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05052649
xxx
  US – ORACLE LAUNCHES ORACLE CARD FOR PEN WINDOWS
Computergram International (CGI)   1 May 1992 p1
ISSN: 0268-716X

Oracle (Redwood Shores, CA) has introduced Oracle Card for Pen Computing
and Oracle Card 1.1 for Windows. The Pen Computing version is for now
Microsoft's Windows for Pen Computing and the program is designed to enable
application developers to build client-server applications using pen
computers as clients. It includes the ability to **store** 'ink' generated by
pen-based operating systems into Oracle databases. Ink is a new data type
integrated into pen-based operating systems that displays the strokes of
the pen and stores them as they are created by the user. It needs an 80386
pen-based computer, Microsoft Windows for Pen Computing, 4Mb of memory and
an Oracle database. It will be shipped and priced in the fourth quarter.
Immediately available is Oracle Card version 1.1 for Windows. The new
version of the **portable** graphical **client** -server application development
environment adds support for IBM's DB2 database management system, Dynamic
 Data Exchange with third- **party** Windows applications, and International
Character Support. The run-time version is USD1r300 for one licence, and

USDlr2,150 for a pack⬤ of eight licences, USDlr3,95⬤or 16 licences, USDlr7,650 for 32, USDlr14,500 for 64, and USDlr25,500 for 128. A version for the Macintosh is planned for the third quarter.

COMPANY: ORACLE

PRODUCT: Operating Systems (73720S); CAD/CAM Mechanical Software (COSW);
EVENT: NEW PRODUCT EXTENSION (33);
COUNTRY: United States (1USA); NATO Countries (420); South East Asia
           Treaty Organisation (913);

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Set·    Items    Descrip[ ]
S1    3972746    TARGET? OR OBJECT? OR GOAL? OR DESTINATION?
S2   15726066    DEVICE? OR CLIENT? OR NODE? OR  TERMINAL OR PROCESSOR? OR -
                 MICROPROCESSOR? OR COMPUTER? OR MICROCOMPUTER? OR UNIT? OR IN-
                 STRUMENT?
S3    245114     (WIRELESS OR WIRE()LESS OR MOBILE OR PORTABLE OR CELLULAR -
                 OR CELL OR IN()RANGE OR INRANGE)(2N)(DEVICE? OR CLIENT? OR NO-
                 DE? OR COMPUTER? OR TERMINAL)
S4    3332084    STORE OR STORING OR SAVE OR SAVING OR KEEP OR KEEPING OR P-
                 RESERV?
S5   10020761    PART? OR BLOCK? OR CHUNK? OR SEGMENT? OR PIECE?
S6    4038829    VERSION? OR EDITION? OR RELEASE?
S7   12724381    FILE? OR DATA OR INFORMATION OR RECORD?
S8    6186062    COMMUNICAT? OR TRANSMIT? OR SEND? OR PASS()(ON OR ALONG OR
                 OVER) OR CONVEY? OR TRANSFER?
S9       225     S3 (S) S4 (S) (S5 (3N) S7)
S10      351     S3 (S) S8 (S) (S1 (2N) S2)
S11   1598284    (UPDATE? OR UP()(DATE? ? OR GRAD?) OR CURRENT OR CHANGE? OR
                 MODIF? OR REVIS? OR REVAMP? OR UPGRAD? OR NEW)(3N) S7 (3N) S7
S12   465449     S6 (S) (MULTIPLE OR MANY OR PLURAL? OR NUMEROUS OR SEVERAL)
S13   5602201    SELECT? ? OR PICK? ? OR CHOOS? OR DECID? OR SPECIF? OR DES-
                 IGNAT? OR DETERMIN?
S14    42628     (LEAST OR SMALLEST OR MINIMAL OR MINIMUM OR LITTLEST)(2N)(-
                 TIME OR PERIOD? OR INTERVAL? OR DURATION OR FREQUENCY)
S15    34904     S12 (S) S11
S16      340     S13 (S) S14 (S) S6
S17        1     S9 (S) S10
S18       15     S9 (S) S15
S19        0     S9 (S) S16
S20        9     S10 (S) S15
S21        0     S10 (S) S16
S22       25     S17 OR S18 OR S20
S23       17     S22 NOT PY>2001
S24       16     S23 NOT PD>20010801
S25       15     RD (unique items)
File  15:ABI/Inform(R) 1971-2003/Dec 31
          (c) 2003 ProQuest Info&Learning
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          (c) 1999 Business Wire
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          (c) 2003 CMP Media, LLC
File 275:Gale Group Computer DB(TM) 1983-2003/Dec 31
          (c) 2003 The Gale Group
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          (c) 2003 IDG Communications
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File 160:Gale Group PROMT(R) 1972-1989
          (c) 1999 The Gale Group
File 553:Wilson Bus. Abs. FullText 1982-2003/Nov
          (c) 2003 The HW Wilson Co
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STaying in Sync, at HOme and on the Road (Helpline)
Gary Gunnerson
TEXT:
      I run a calendaring application on my network, and when I go on the
road with my **portable   computer** I take a copy of my electronic calendar
with me. While on the road I make changes to my schedule and database. Is
there a way to **keep** my applications synchronized? Your question strikes
at the very heart of groupware and distributed data concepts. Information
synchronization continues to lag behind the real need for people like
yourself to become completely untethered from the central datastore.
Consequently, operating systems, database engines and groupware products
are barely beginning to implement the concept of transparent data
ownership and data access, although promises abound. Fortunately, some
vendors do offer a glimmer of hope. The latest **version** of Borland's
Sidekick (v2.0) lets you take your calendar on the road and then, through
a menu selection, shows a comparison of two calendar files so you can copy
or move information between the two. This reconciliation process, although
still manual in nature, offers a way to **keep** your calendar and to-do
lists synchronized. (It would be even nicer if it were fully automated.)
Lotus Notes offers one of the best examples of synchronized data files. It
takes data from far-flung Notes servers (running OS/2) and negotiates the
appropriate updates through the wide area network links. The nasty side of
this solution is the requirement for a complete commitment to the Notes
environment and the continued high price tag of the product itself and its
associated operating platform. If you really need the capability to
synchronize your information between various offices, Notes will work
well, but it may be a little overkill if you only need to synchronize two
copies of your calendar. Frankly, this capability of database, file and
record synchronization needs to become part of the underlying operating
system in order to make all applications capable of reconciling their
multiple iterations. Until that happens, you can look to progressive
vendors to roll these concepts into their own offerings. We ran
communication software on PCs with standalone modems for quite some time.
Recently, the systems department installed a PC network and took all the
modems away and told us to use the network to get to a modem pool. It
works well, but the characters come across the screen in a very jerky
fashion. Why does this happen and what can I do to fix it so it will
scroll smoothly again? There's really no easy way to make your
communications session appear the way it used to, with smooth scrolling
screens of **information** . **Part** of the problem stems from the very nature
of local area networks. In order to offer great performance and quick
response times to file and print services, networks talk in large **chunks**
of **information** . These **chunks** or **blocks** of messages between your PC
and a file server usually range from 512 bytes to 4,096 bytes. A normal
communications software package talks to a standalone asynchronous modem
one character (byte) at a time. Consider a scenario in which your modem
pool exists on one end of your network, lying next to the telephone
system, and you need to dial into a service like Dow Jones to check your
stock prices to find out how much money you made today. Each keystroke you
make must be packaged within the network communication packet and sent
along to the modem pool device and the modem, which must acknowledge
receipt; the acknowledgement must then be retransmitted by the modem pool
server and received by your LAN communications software. This process
creates a noticeable delay. In addition, when a remote communications
service fills a screen of **information** for you, the jerky screen **update**
begins , and you see what looks like quick bursts of information appearing
on the screen. These bursts represent the modem pool server's best

attempt to give you a r⬤nable tradeoff between the ch⬤ter-at-a- time
information it receives from the modem and the large **chunk** of
information it needs to send on the LAN to **keep** things running
smoothly. Most packages I've seen show about a quarter of a screen or 512
bytes of information at a time. In fact, if you use a stopwatch and
record the time required to **update** a screen of **information** , you will
find that it is very close to the same amount of time it took with your
smooth scroll receipt with a standalone modem. So I guess that you have to
get used to the jerky screen. But fear not, your communication session
should be just as productive as it was before and your company will **save**
money by sharing the modem and phone line costs with other members of the
pool. Our department set up a small network on which all the computers
contained essentially the same equipment. The 386 SX computers each have 2
Mb of memory, a VGA on the system board and an Ethernet adapter. Recently,
we've been asked to expand our network by adding the existing computers in
another department on the floor. Unfortunately, that department has
machines that span 10 years in age, with everything from monochrome
monitors to SuperVGA systems on XTs to 486-class computers. How can I
modify my network batch **files** to recognize this hardware array? This
topic really hits some people's hot buttons. Ideally, software would
recognize the capabilities of each computer and run transparently. LAN
administrators **keep** hoping the software vendors will provide transparent
access but in reality few packages can handle the PC variety gracefully.
Consequently, each network implementation invents a way to indicate to
batch files which parameters pass the appropriate startup information to
the programs. The most common method uses the DOS environment variables
with SET parameters for smart execution. (See accompanying chart.) Over
time, LAN fans found that two types of parameters need to be presented to
application software: machine- or PC-specific information and people- or
LAN user-specific information. When PC-centric data resides in the
machines' AUTOEXEC.BAT files, hardware specifics get covered by the PC
boot process. Then, ideally, network user information becomes appended to
the DOS environment space when someone logs into the network file server.
The accompanying figure provides an example of some DOS environment
variables and their optional values. Administrators then write their batch
files with GOTO instructions that conditionally execute the command
sequences to invoke the appropriate drivers. Of course, you must assume
that the software can call a specific driver set from the command line,
refer to the location of a driver set for each machine type from the
command line or, as we'd hoped in the beginning, understand what the
computer contains in the first place. Any of these options gives users
work- arounds for smart execution; if none exist, specific executable code
cannot be shared without installing it for each hardware combination on
the network. To make a network application truly aware of its operating
environment would require a network operating system- specific API
interface that would **store** machine specifics by serial number or LAN
adapter address and user specifics by user ID. So far NOS vendors are much
farther ahead with the user information, but application vendors do not
couple tightly with the NOS anyway. Instead , the users end up with a
myriad of methods for **storing** machine specific information. The move to
graphical user interfaces (GUI) is one positive step toward software's
independence from the physical hardware, because one profile for each
computer lets application software talk to a virtual machine that then
translates to the physical implementation. We use remote control software
on our LAN to gain access to a shared CD ROM and control **several** e-mail
gateways. Recently we tied a remote office into our main LAN with bridges
and a dedicated 56 Kbps link. Now the remote control software shows about
a one-second time delay for every character echoed through the link. How
can we reduce the delay between characters? In effect, this is the same
problem encountered above with the modem pool software. LANs operate with
large packet sizes and typing implies a character at-a- time packetization.
To get around the problem, you need to reduce the packet size between your
computer and the remote machine being controlled. This may require
adjusting the packet size of the bridges as well. **Many** LAN drivers
contain a way to adjust the packet size when booting your PC but do not
allow adjusting the packet size later. Ideally, the LAN driver would
adjust the packet to the most appropriate size depending on the response

to the remote LAN address but few vendors implement dynamic packet size adjustments. Instead, many arbitrate the starting packet size by the attachment to a user's home server and leave it there. The tradeoff again is the difference between responsiveness and throughput. Smaller packet sizes will be more responsive through slow links but offer less throughput and actually slow your PC's access to the local part of your LAN. So you need to adjust to a smaller packet size when you load your LAN driver, force a logon to a server through the remote link or live with the lack of responsiveness and encourage your NOS vendor to work on dynamic packet adjustments.

TEXT:
     I run a calendaring application on my network, and when I go on the road with my **portable   computer** I take a copy of my electronic calendar with me. While on the road I make changes to my schedule and database. Is there a way to **keep** my applications synchronized? Your question strikes at the very heart of groupware and distributed data concepts. Information
. . .

...and data access, although promises abound. Fortunately, some vendors do offer a glimmer of hope. The latest **version** of Borland's Sidekick (v2.0) lets you take your calendar on the road and then, through...
...move information between the two. This reconciliation process, although still manual in nature, offers a way to **keep** your calendar and to-do lists synchronized. (It would be even nicer if it were fully automated...

...become part of the underlying operating system in order to make all applications capable of reconciling their **multiple** iterations. Until that happens, you can look to progressive vendors to roll these concepts into their own...

...way to make your communications session appear the way it used to, with smooth scrolling screens of **information** . **Part** of the problem stems from the very nature of local area networks. In order to offer great performance and quick response times to file and print services, networks talk in large **chunks** of **information** . These **chunks** or **blocks**   of messages between your PC and a file server usually range from 512 bytes to 4,096...

...This process creates a noticeable delay. In addition, when a remote communications service fills a screen of **information** for you, the jerky screen **update** begins , and you see what looks like quick bursts of information appearing on the screen. These bursts...
...reasonable tradeoff between the character-at-a- time information it receives from the modem and the large **chunk** of **information** it needs to send on the LAN to **keep** things running smoothly. Most packages I've seen show about a quarter of a screen or 512 bytes of information at a time. In fact, if you use a stopwatch and **record** the time required to **update** a screen of **information** , you will find that it is very close to the same amount of time it took with...

...not, your communication session should be just as productive as it was before and your company will **save** money by sharing the modem and phone line costs with other members of the pool. Our department...

...with everything from monochrome monitors to SuperVGA systems on XTs to 486-class computers. How can I **modify** my network batch **files** to recognize this hardware array? This topic really hits some people's hot buttons. Ideally, software would recognize the capabilities of each computer and run transparently. LAN administrators **keep** hoping the software vendors will provide transparent access but in reality few packages can handle the PC...truly aware of its operating environment would require a network operating system- specific API interface that would **store** machine specifics by serial number or LAN adapter address and user specifics by user ID. So far...
...couple tightly with the NOS anyway. Instead , the users end up with a myriad of methods for **storing** machine specific information. The move to

graphical user interface (GUI) is one positive step to software's...

...use remote control software on our LAN to gain access to a shared CD
ROM and control **several** e-mail gateways. Recently we tied a remote
office into our main LAN with bridges and a...

...the remote machine being controlled. This may require adjusting the
packet size of the bridges as well. **Many** LAN drivers contain a way to
adjust the packet size when booting your PC but do not...

...on the response to the remote LAN address, but few vendors implement
dynamic packet size adjustments. Instead, **many** arbitrate the starting
packet size by the attachment to a user's home server and leave it...

25/5,K/2   (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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02421507   SUPPLIER NUMBER: 63800174   (USE FORMAT 7 OR 9 FOR FULL TEXT)
**E-Business - Companies are deploying a phalanx of Internet technologies in
their quest for a competitive edge.(Internet/Web/Online Service
Information)**
Rupley, Sebastian
PC Magazine, 140
August 8, 2000
ISSN: 0888-8507   LANGUAGE: English   RECORD TYPE: Fulltext; Abstract
WORD COUNT: 1996   LINE COUNT: 00167

ABSTRACT: New Web technologies for E-business are evolving rapidly, with
many new products built around the XML standard. XML lets the Web act much
like a library card catalog with greater intelligence, improving Web
searching and supporting sophisticated intelligent assistants. It can work
in conjunction with the hybrid XHTML language to allow more effective
language translation and enable multilingual sites. IP Security (IPsec,) a
new security standard in development, introduces e-commerce security at the
network layer rather than the application layer as found in earlier
implementations. Voice over IP technology is enabling many commerce sites
to let customers talk to human representatives as they navigate, but
current implementations tend to be unreliable and hard to use. New software
lets e-merchants analyze customer behavior to improve service and
strengthen marketing.

 GEOGRAPHIC CODES/NAMES: 1USA United States
 DESCRIPTORS: XML; Internet/Web technology; Business to business market;
   Internet/Web overview
 EVENT CODES/NAMES: 361 Services development
 PRODUCT/INDUSTRY NAMES: 4811520 (Online Services)
 SIC CODES: 4822 Telegraph & other communications
 NAICS CODES: 514191 On-Line Information Services
 FILE SEGMENT: CD File 275

...   devices more secure and reliable, with better store-and-forward
capabilities, more robust instant messaging, and improved **data**
synchronization.
     Part of the technology challenge in extending e-business
applications to **new** devices is facilitating cross-platform access to
data . **Many** companies are competing in this area. Sun Micro systems and
IBM would like to see Java and XML work together to accomplish this. Sun
recently expanded XML support in its j2ee (Java2 Enterprise **Edition**) and
announced the development of a Java api for XML messaging. An IBM
technology called WebSphere Transcoding...
...Solution Set for Mobile Wireless Internet, reconstitutes Web data into
formats that hand-held devices can display. **Many** kinds of content are
being repurposed into wml (Wireless Markup Language) format for display on
hand-helds...

25/5,K/3   (Item 2 from file: 275)

01439758   SUPPLIER NUMBER: 10957512   (USE FORMAT 7 OR 9 FOR FULL TEXT)
MiniFinders. (buyer's guide to Apple Macintosh hardware and software)
  (buyers guide)
MacUser, v7, n8, p135(49)
August, 1991
DOCUMENT TYPE: buyers guide   ISSN: 0884-0997   LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT
WORD COUNT: 80288   LINE COUNT: 06476

  DESCRIPTORS: Directories; Peripherals; Software packages
  SIC CODES: 7372 Prepackaged software; 3572 Computer storage devices;
   3577 Computer peripheral equipment, not elsewhere classified; 3575
   Computer terminals
  TRADE NAMES: Apple Macintosh (680X0-based system)--Equipment and supplies
  FILE SEGMENT: CD File 275

  ...   9674. (June '91)
    DAL (Data Access Language) 4
    DAL is an API (application programming interface) for sophisticated
client /server database access. Server operating systems include IBM MVS
and VM as well as VAX/VMS. Database...CA 94501. (800) 334-6056 or (415)
748-6680. (Oct '90)
    Lasergraphaics CPS 3
    This thermal-wax- **transfer** printer is fast but has mediocre print
quality. Has low resolution, with dpi of 203 (H) and...

  ...Rd., Eden Prairie, MN 55344. (612) 944-9457. (Oct '90)
    Mitsubishi S340-10 4
    This sublimal-dye- **transfer** printer creates excellent proofs. Superb
print quality. Color range is limited, although the gradients are
excellent. Would...

  ...80
    4 1/2
    Offering true PostScript, the Colormate PS Model 80 was the fastest
thermal-wax- **transfer** color printer we tested for our May '91 lab report.
Standard RAM configuration is 8 MB. Halftoning...

  ...8000. (May '91)
    Oce OceColor 4
    Offering true PostScript, the OceColor is a fast, compact thermal-wax
 transfer color printer. Standard RAM configuration is 5 MB, upgradable to
8 MB. Halftoning is poor, but overall...Model 10 3 1/2
    The ColorScript 100 Model 10 is the first four-color thermal-wax-
transfer PostScript printer. Fast and simple to install and use. Excellent
typographic capability. Standard RAM configuration is 5...

  25/5,K/4   (Item 1 from file: 674)

  094973
  Linux lends a hand to Sun engineers
  Byline: JOHN COX
  Journal: Network World   Page Number: 1
  Publication Date: July 16, 2001
  Word Count: 1132   Line Count: 103

  Text:
  ...Linux? Sun says the open source operating system has shown itself to be
reliable, adept at handling **multiple** applications and inexpensive. Sun

rejected far more prev⬤t handheld operating systems, ⬤h as Windows CE and Palm...

... a team of vendors to create a rugged, PDA-sized handheld, packed with memory, running a compact **version** of Linux and a suite of applications ported to it. The initial test group of 50 engineers...

... service application for the device.The new Linux appliance is expected to let engineers visit more jobs, **record** customer **information** more accurately and continuously **update** Sun's database for identifying and fixing support problems. Until now, engineers lugged around two-way pagers to get alerts on their assignments and basic customer contact information, cell phones to **keep** in touch with supervisors, laptops to run access and download troubleshooting data, and paper forms that had to be filled out and filed for each job. Initially, the Linux device in **many** cases will be one more piece of equipment to carry around, although Richards expects it to quickly replace **several** , and maybe even all, other devices.About a year ago, Richards' group began examining Sun's paper...

... packed in with other server brands. The new application will be able to key a set of **information** to the **particular** job that an engineer is working on. So for a given memory chip replacement job, the database...

... usable when switched on. It had to have enough processing power and memory to run applications and **store** fairly large files. A wireless modem would let it periodically synchronize with corporate servers. Windows CE was... Sun's experience shows that Linux can be a key part of extending critical enterprise applications to **mobile** computing **devices** . But it also shows that doing so requires extensive, and expensive, custom programming, and a closely supervised...

... to with an ironic comment."Aside from the fact this was custom development, with a brand-new **version** of Java and Linux, and brand-new applications, it wasn't that hard," he says.

25/5,K/5   (Item 2 from file: 674)
DIALOG(R)File 674:Computer News Fulltext
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091732
Syncing handhelds to corporate data wirelessly isn't easy
Byline: JOHN COX
Journal: Network World   Page Number: 16
Publication Date: February 26, 2001
Word Count: 823   Line Count: 79

Text:
   NEW   YORK - The benefits of synchronizing **data** over wireless networks between handheld users and corporate networks promise to be great, but observers say the...

...mobile users, updating corporate applications with data collected in the field, and providing end users with faster **data** response times by enabling them to **store** **updated** **data** on their **mobile** **devices** .But enthusiasm for such benefits is tempered by concerns that wireless links are slow, prone to glitches and expensive. IT groups also have to resolve tough issues such as who's responsible for **data** and the **changes** to it; how to reconcile **changes** to **data** stores; how to juggle **data** structures in different applications; and how to design applications for low-storage, low-bandwidth handheld devices."It...
... acquisition WeSync, that will let Palm's newly unveiled MyPalm portal act as a clearinghouse for pushing **data** **changes** out to all Palm devices authorized to share contact, calendar and e-mail **information** ."A **change** to **data** on any Palm device will be synchronized with all other authorized Palm devices linked to the portal...

... desktop computer d██a laptop," says Bill Jones, ██ce president of product management with Synchrologic, one of **several** synchronization vendors exhibiting at the show. "How can we harness the raw computing power of the enterprise...

... server products in a few months.Another vendor, Extended Systems of Boise, Idaho, is working on a **version** of its ExtendConnect Server software that is designed for wirelessly connected handhelds. A key part of the new **release** is a **store** -and-forward messaging system that can handle the vagaries of glitch-prone, low-bandwidth wireless connections."Right...

... The traditional difficulties of replicating data are compounded by unreliable, low-bandwidth wireless networks, which might lose **part** of a **record** or drop a database transaction halfway through the **update** . The transmission of **data** has to be minimized and even more managed. It needs to be sent in small chunks and be able to restart after a dropped connection without the entire **update** being sent again.Dynamic **data** , such as changing inventory or package shipping information, is the worst for synchronization, Gonzalez says. It's better to **keep** such data on a server and let users, if they must, wirelessly access it via a browser. **Data** that **changes** rarely is better-suited for synchronization, but users need to ask themselves how valuable is this data...

... how necessary is it to wirelessly synchronize it? "Why not use a cradle?" Gonzalez asks. "If the **data** **changes** , say, every Tuesday at 6 a.m., just tell all your users to dock their handheld in...

25/5,K/6   (Item 3 from file: 674)
DIALOG(R)File 674:Computer News Fulltext
(c) 2003 IDG Communications. All rts. reserv.

089199
Comdex: SAN management dominates show floor
Byline: Agam Shah
Journal: Network World
Publication Date: November 15, 2000
Word Count: 791   Line Count: 75

Text:
... Pvt. Ltd., based in Havant, U.K., introduced three hardware-based SAN analyzers for desktops, notebooks and **portable** **devices** . **Devices** connect to SAN components, and performance of Fiber Channel SANs is monitored and analyzed. The SAN analyzers...

... manages the controllers. CMD is working on standards that will be incorporated in the soon-to-be **released** FC2 standard, according to Simon Huang, chief executive officer. CMD Technology, in Irvine, Calif., is at http...

... to Fibre Channel Host Bus adapter (HBA), the HHBA-5220-1. The HBA adapter is capable of **transferring** data up to 2G bit/sec. The product is an **upgrade** to the HHBA-5220, which can **transfer** **data** up to 200M bit/sec in half duplex mode, and 400M bit/sec in full duplex mode...

... com. SerComm Corp., a server appliance provider, introduced its SOHO Server, a network attached storage (NAS) **device** **targeted** at home networks. The SOHO Server aims to act as a hub, a single storage device connecting **multiple** home devices that include standalone PCs, tape drives and modems. SerComm, in Hsinchu, Taiwan, is at http...

... device, which creates an end-to-end data tunnel over an IP network, ensuring error-free data **transfer** . While **transferring** data over an IP network, the SL1000 component on one end converts the data into a packet...

... attached to the SAN component on the other end. SAN Valley doesn't buy the notion that **transferring** data from a server to tape backup over an IP

network will mean the ta░drive is...

... Valley. "Quality of Service (QoS) exists, it just has to be used," to enhance the experience of **transferring** data over an IP network, he said. SAN Valley Systems, in Campbell, Calif. is at http://www...

25/5,K/7   (Item 4 from file: 674)

088868
Wares extraordinaire
Network   World   columnists   and   newsletter   writers   talk   about
**   category-breaking products and services.**
Byline: Staff
Journal: Network World   Page Number: 83
Publication Date: November 13, 2000
Word Count: 3083   Line Count: 288

Text:
... an offering that impacts the user and managed services provider markets. Let's face it, trying to **keep** pace with the growth in demand (new users, technologies and services) has stressed **many** IT departments to the breaking point. IT managers have used outsourcing, but they've always run into...

...agreement (SLA) monitoring, internal IT trouble-ticket response (such as first-level tech support), software monitoring and **upgrades** , and **data** backup.   In   short,   anything that you would normally do internally, SilverBack can arrange for through InfoCare. To...
... something you hold – the card – and something you know, such as a password. Smart cards let users **keep** their personal identification numbers (PIN), passwords and secret keys in a safe place – in the card's protected memory – rather than **storing** them on a PC or server where they're vulnerable to eavesdropping. Combined with PINs and biometrics... become a fast, cheap, easy way for average users to hang virtual padlocks on their PCs and **portable** Web **clients** .Kobielus is an analyst with The Burton Group, an IT advisory service. He's located in Alexandria, Va. On the network's edge – David RohdeWhen a carrier says it wants to **save** you some money, often what it means is it wants to **save** itself some money. Just being a telecom carrier is so expensive that carriers almost always try to...

... second-stage DSL aggregation, a key need of local carriers to pull together DSL streams arriving from **many** buildings and neighborhoods before hauling them off to core networks.The key software feature that gave ASC...

...services to users, but they're quick to implement them on the trunk side if it'll **save** them money. The boxes are software-configurable to provide any service to any port.ASC customers include...
... hopes to announce some big incumbent carriers as aficionados too. After all, even Bell companies want to **save** themselves – er, you and your remote-access users – some money.Rohde is managing editor of The Edge... manner to employees, partners, vendors and customers. You'd like the information to be in one data **store** for ease of use and enhanced security, but which one – the directory or the database?Radiant Logic...

... is simply a pointer. It's stored in the directory and points to the location of a **piece** of **data** (a field, row or calculated value) in a relational DBMS. No data synchronization is necessary; the relational DBMS value is retrieved when needed by any directory viewer application. This way, each data **store** can be optimized for what it does best: the directory for browsing, the database for transaction processing...

...while leveraging the hierarchical structure of the directory for secure,

easily implemented br●●ng. RadiantOne works with ●●P **Version** 3
directory servers and most major relational database products. You may not
be aware that you need...

... Internet service assurance." The eAssurance software provides a
comprehensive business approach to sitewide Internet service-quality
management. **Many** load-balancing products even out the load of Web site
requests across servers in the hope of...

...significant impact on the computer industry as a whole: personal desktop
firewalls. I take this position for **many** fundamental reasons.Within the
home telecommuting and small-office environments, use of fixed IP addresses
with cable...the market segment, and hope that both the larger and smaller
companies now competing in this space **keep** in mind a couple of things:
Dangers to desktops come from inside and outside a corporate perimeter...

... usable by Jack and Jill Average with minimal impact upon their
day-to-day jobs. One too **many** false positive is a sure way to get users
to unplug a product meant to help them...

25/5,K/8   (Item 1 from file: 696)
DIALOG(R)File 696:DIALOG Telecom. Newsletters
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00762680
Capturing The Elusive Corporate Contract
Wireless Insider
April 23, 2001 VOL: 19   ISSUE: 16   DOCUMENT TYPE: NEWSLETTER
PUBLISHER: PHILLIPS BUSINESS INFORMATION
LANGUAGE: ENGLISH   WORD COUNT: 1866   RECORD TYPE: FULLTEXT

 Give Hard-To-Please Enterprises What They Want: Everything, At One Low Pri
ce By Ruth Suarez Zane   Because a multitude of customers can be snat
ched up in one tidy contract,   enterprises are

COMPANY NAME(S): Air2Web ; Argus ; AT&T Digital PocketNet ; AT&T Wireless ;
Bass Hotels & Resorts ; Carrier ; Carriers 's Enterprise Voice/Data ;
Cost/Packaging ; Give Hard To Please Enterprises ; Holiday Inn Express ;
Mobile Office ; Nextel Communications ; PCS' ; Sprint PCS Wireless ; Sybase
; Verizon Wireless ; ViAir ; VoiceStream ; Wireless Inbox Corp

TEXT:
...hotels and making room reservations. Using Atlanta-based Air2Web's
Internet platform, the system allows hotels to **store** room preferences and
credit
card information to offer guests personalized reservations.
There's no question about the popularity of mobility: **wireless   devices**
in
the workforce are getting strong use. To wit, the Navy's Military Sealift
Command is using...

...Identical Twins

While data presents wireless carriers with a fresh revenue source that
could entice lots of **new** enterprise customers, combining **data** services
with
voice offerings is no easy task. Fusing voice and data services into one,
fully
functioning...

...introduced a new pricing plan to eliminate confusion associated with the
costs and rules accompanying voice and **data** plans. Its **new** corporate
plan,
Total Digital Connection (which also has a consumer **version**) was created

to
simplify voice and data.
For one rate, the customer gets a large amount of business marketing. "
Many enterprises have begun
their wireless data concept projects, and others are just getting started.
With
technology changing rapidly, we find **many** enterprises need some help
sorting the
hype from the reality."
Sprint PCS put together a team of...

...improved customer response, as well as top-line benefits - m-commerce,
new
customer interaction and retention models. **Many** of the second-wave of
wireless
applications will require increased bandwidth - and Sprint PCS will be
there...

...but data is
fueling the industry at speeds handset manufacturers, software developers
and
carriers are struggling to **keep** up with.
"Businesses are moving to large scale purchases but a limitation right
now is network speed," says Todd Leeson, VoiceStream director of business
marketing. " **Many** U.S. carriers are operating between 9.6 and 19.2
kilobytes per
second and a lot...

...networks
that carriers are just doing the best they can without investing ridiculous
amounts of money to **upgrade** their **data** networks."
While all players in the wireless sector benefit from making enterprise
wireless needs a reality, coordinating...ViAir's
corporate wireless data product, Wireless Inbox Corp., to target North
American
wireless customers. Nextel packages **data** as **part** of its on-line
package.
According to Calabrese, Nextel is one of the more successful carriers
targeting...

...its voice and data, it's targeting
specific professionals with its Digital PocketNet plan. For instance, its
 Multiple Listing Service is designed for real estate agents, simplifying
property searches, and giving users access to up...PCS, 913/762-7017.)
Carriers' Enterprise Voice/Data Plans

Carrier: AT&T Wireless
Service: Digital PocketNet
Description: **Multiple** Listing Service is designed for real estate agents
to
simplify property searches by allowing agents to search...

...to 10 different email inboxes on
Nextel Internet-ready phone. Users also receive email alerts and can **store**
 up
to 10 QuickText messages.
Cost/Packaging: Price included in Nextel Online Plus service. Nextel Online
Plus...

 25/5,K/9   (Item 2 from file: 696)

00752195
 STREAMING MEDIA BATTLE
CONSUMER ELECTRONICS

December 18, 2000 DOCUMENT TYPE: NEWSLETTER
PUBLISHER: WARREN PUBLISHING INC.
LANGUAGE: ENGLISH   WORD COUNT: 593   RECORD TYPE: FULLTEXT

RealNetworks and Microsoft squared off last week in race to deliver advance
s in Internet audio and video software that exploit faster

COMPANY NAME(S): Audio ; Hewlett Packard ; Kenwood ; Microsoft ;
Singingfish ; Technicolor ; Thomson ; TuneTo ; Wall St Journal ; Windows
Media Video

TEXT:
...that exploit faster
communications and smaller devices.

At Streaming Media West in San Jose, Microsoft demonstrated updated
 version of Windows Media technology it said approaches DVD quality at
transmission speeds of 500 kbps, which is largely limited to broadband
networks. Windows Media Video and Audio 8 software can **store** audio
recording in 1/3 of file space required by MP3 and download 60% faster,
Microsoft said...

...software that it said was up to twice as fast as its existing
products and could handle **multiple**   **data**   formats. RealSystemIQ is
update of
software that RealNetworks and others use to broadcast audio and video over
Internet. Software typically is...

...in decentralized manner that would
reduce clogging of networks.

RealNetworks exec. told Wall St. Journal that Microsoft **release** was
"me-too" product that didn't represent significant advance in technology.
But Kenwood showed portable CD players using Microsoft format that could
 store more than 22 hours of music on single disc. Microsoft Pres. Steve
Ballmer also demonstrated multimedia features...

...PC based on
Windows CE operating system to demonstrate technology designed to deliver
high-quality audio to **devices** with **wireless** · modems. Typical wireless
modem
transmits content to handheld at 19.2 kbps, but TuneTo CEO Timothy Bratton
said technology overcomes delivery problems by dividing audio **files**   into
2
 parts . Portion of song is downloaded in advance by users and stored on
handheld PC or other device...

 25/5,K/10   **(Item 3 from file: 696)**
DIALOG(R)File 696:DIALOG Telecom. Newsletters

00734701
 Q&A With SmartRay's Troy Tyler
CableFAX
July 11, 2000 VOL: 11   ISSUE: 134   DOCUMENT TYPE: NEWSLETTER
PUBLISHER: PHILLIPS BUSINESS INFORMATION
LANGUAGE: ENGLISH   WORD COUNT: 2465   RECORD TYPE: FULLTEXT

        As promised in our last issue of min's NMR, here is the complete Q&A ·
 with Troy Tyler, CEO/president of SmartRay, which provides a network of f
ree content to wireless users. The company

COMPANY NAME(S): AT&T Po███tNet ; New York Times ; Q & A ███howtime
Networks ; SmartRay Realtime Entertainment ; Tyler ; Viacom

TEXT:
...turning out or evolving, I call this the bear or the
mountain lion problem. You've got **several** of these companies out there
that are
really turning into big bears. And you have to decide...
...content brands, they'll tell you what's in their heart of hearts. You'll
find
that **many** are frustrated by perhaps four or five brands that are
increasingly
strengthening their brand proposition in ways...execution, and
then consolidation in a lot of segments. Financial news or entertainment
news,
there are too **many** people fighting for attention.

mNMR: Which three sites other than your own do you visit daily?

Tyler...

...platform. Each platform will do
what it really does well, and then we'll have some stepchild **version** of
the
experience of the other platform. You'll see the same thing in mobile.
You're...

...well.

mNMR: Some publishers think or hope that the convenience of delivering
highly personalized content onto a **mobile**   **device** , where customers are
used to
paying incremental fees for added service, may revive the fee-based model
...We're building a network of content with myriad partners – unlike.
the portals that are trying to **keep** you on their site. Our whole strategy
is to
be an open garden site.

mNMR: And presume...construct their content? Doesn't wireless delivery
demand even greater
personalization, even more emphasis on real-time **updates** to **data** ? It
seems to
me, in some respects, wireless raises some expectations about content.

Tyler: The two most...

...architected. We don't run applications against that database of
information. Our applications run only upon that **piece** of **information**
of
interest in the stream. We think it's important to do that because, in
mobile,
personalization...
...show it around.
The most popular delivery is geography-based, real-time weather. Almost
everybody gets it. **Many** of those content types will continue to dominate.
News
related to finance and things that are transactional...

 25/5,K/11   **(Item 1 from file: 636)**
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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04118932   Supplier Number: 54124022   (THIS IS THE FULLTEXT)
AUDIO NOTES.
Audio Week, v11, n11, pNA
March 15, 1999

TEXT:
 Web entertainment site host Entertainment Boulevard selected I-Fill, music
and video distributor, to provide product fulfillment for its online store
set for 2nd-quarter launch. Site will have inventory of more than 180,000
music and film titles and will sell additional entertainment-related
merchandise. Market Tracking International said music sales over Internet
topped $28.7 million last year and are expected to reach $550 million by
2000, $3.3 billion by 2004. ------ Creative Labs, girding for battle with
archrival Diamond Multimedia, will ship portable audio player in 2nd
quarter as first in series of MP3-related products, spokeswoman confirmed.
Player, which will allow user to play back audio downloaded from Internet
to PC hard drive, will have 64 Mb memory, be priced under $200, contain
graphics display that shows title of song being played, spokeswoman said.
Manufacturer is said to be S. Korea's Saehan, which built prototype that
Creative showed at Comdex in Nov., but spokeswoman declined comment. As
part of launch, Creative has signed download agreements with Audible.Com,
Audio Highway.Com., GoodNoise, Music Match. New product is believed to be
part of broader Creative Labs restructuring built along
     divisions dedicated to specific products that's taking place within
company to focus divisions on specific products. New Portable Digital
Entertainment Group, which will be headed by Multimedia Products Vp Hock
Leow, will handle MP3 products. "It's definitely a significant move as it
shows they're moving away from sound cards into other lines," analyst said.
Analysts had been concerned that Creative Labs was headed for flat 3rd
quarter amid faltering of its audio business, which suffered from increased
competition and lack of new products. Introduction of MP3 portable will set
up showdown with Diamond Multimedia, which has competed with company in
sound card and other PC peripheral markets. Diamond set off first storm
last fall when it introduced its Rio player at $199. RIAA later filed suit
against Diamond alleging that Rio violates Audio Home Recording Act (AHRA).
------ Combination of DTV-ready display devices and set-top boxes is better
option for consumers than integrated DTV set, Strategy Analytics (SA)
report said. Study said DTV electronics will need to be updated regularly
because of technology changes, and it won't be cost-effective to replace
both box and display device each time. It predicted that only 6% of
households will own integrated DTV set by 2005 (SA -- 617-738-1300). ------
Microsoft made undisclosed equity investment in newly named Reciprocal
Inc., which developed software and other equipment to function as
electronic clearinghouse for access to digital content. Reciprocal,
formerly called Rights Exchange Inc., is believed to have received $15
million from Microsoft in addition to what it called "strategic technology
and marketing alliance." Reciprocal said its technology prevents
unauthorized access to streaming audio or other digital content distributed
over Internet as well as illegal consumption or reproduction of material
after it has been downloaded to PCs. Pres. Paul Bandrowski said result
would be "new market for digital content." **Several** other companies,
including AT&T, IBM and Sony, have announced similar technologies in recent
weeks. Meanwhile, 18 companies made presentations to latest meeting of
recording industry-led Secure Digital Music Initiative (SDMI) March 5. SDMI
session was first for **portable device** working group. **Goal** is to allow
consumer devices to be on market by Christmas selling season that could
record and play back digital audio without violating copyrights. Working
group is headed by Jack Lacy of AT&T. ------ Ten-city media tour was
announced by CEMA to promote car audio and participation in Mobile
Electronics Certified Professionals (MCEP) accreditation program. Tour
starts March 19 at Spring Break Nationals in Daytona and ends just before
Memorial Day. ------ "Retailing and the Internet" is subject of day-long
seminar May 18, Omni Dallas Park West, Dallas, sponsored by CEMA and 4
other trade groups -- CEMA, 703-907-7600. ------ World finals of
International Auto Sound Challenge Assn. (IASCA) will return to Greenville,
S.C., Oct. 9-10 following stint last year in Dallas. IASCA said it will be
3rd time in 11 years of competition that event will be held in Greenville.
------ World's first home DAB tuner goes on sale this week in U.K. from

British hi-fi supplier A███m at about $1,300. Component t███r automatically scans VHS band for DAB transmissions and stores their frequencies. Quality is said to be near CD, with no interference. BBC already digitally simulcasts its analog programs, and commercial stations in U.K. are expected to follow in Oct. BBC soon will expand its service by broadcasting rock and pop music from its archives. BBC executive Will Wyatt hopes receiver costs will decline by 1/3 by Christmas. ------ THX specification for electronic cinema projectors was announced last week by licensor Lucasfilm at ShoWest trade show for theater owners in Las Vegas. Lucasfilm said that although commercial introduction of electronic cinema "is not immediately imminent," spec is needed to "make it clear that THX is committed to lead rather than follow in exploring new technologies." It said spec was developed to guide theater owners in selecting best possible equipment in transitioning to electronic cinema from 35mm film. Company also said it plans soon to certify electronic masters and has started researching various proposed transmission methods as prelude to developing standard "that would guarantee against any compromise in picture and sound quality." ------ Federal Circuit Appeals Court, D.C., rejected Thomson appeal of lower court ruling that backed jury verdict invalidating company claims to 4 basic patents on optical recording technology. Patents have generated $40 million in royalties for Thomson and figure prominently in CD and DVD formats. Three-judge appeals panel, in 4-page decision, said that U.S. Dist. Judge Joseph Longobardi, Wilmington, Del., was correct in finding that "substantial evidence" supported jury verdict that Quixote Corp. had shown "every limitation" in CD patents was "anticipated" by prior invention. Thomson, in requesting appeals court reverse Longobardi's denial of its motion for judge as matter of law (JMOL), argued that verdict rested on "mere" testimony of 2 MCA engineers who worked on videodisc project and that evidence from inventors required "corroboration." Allegations "failed" because Thomson didn't "present circumstances in which there is a need for corroboration," appeals court stated. While Thomson maintained that corroboration was needed because the MCA employees had business dealings with Quixote, argument didn't "rise to the level of self-interest required to justify triggering application of corroboration rule," court said. Thomson's only showing of "potential bias" was cross-exam of one witness meaning that jury "had the necessary facts" to determine credibility. George Badenoch, attorney for Thomson, wasn't immediately available for comment on possible appeal, while Quixote's attorney, Thomas Giannetti, declined comment. Case has been moving through federal courts since 1994 when Thomson sued Quixote, subsidiary Disc Mfg. Inc. (DMI), and 4 other CD manufacturers for patent infringement. All but Quixote and DMI avoided legal battle and settled with Thomson out of court settlements before trial in 1996. Key element of trial had been MCA DiscoVision's unpatented laser videodisc that Quixote had cited as evidence of prior art that could invalidate Thomson patents. Thomson conceded that MCA demonstrated disc in 1972 that showed some claims contained in its 1989-1993 patents, but denied that it "met all elements" of them. Thomson had insisted that laser videodisc didn't involve "substantially" constant CD pit width with track pitch at least 2x width and that it had "crudely formed" round or oval bumps that didn't store information along their length. ------ Harvey Electronics agreement to open Bang & Olufsen stores in metro N.Y. market runs 7 years starting with lease of Manhattan outlet that becomes effective June 1, according to pact, copy of which was filed by Harvey with SEC. Plan requires Harvey to maintain at least $1 million in general liability insurance coverage, $500,000 in property coverage. First year's lease is worth $114,000, with 3% increases stipulated for each year thereafter. Harvey has said it will open 5 B&O locations. ------ Ultimate Electronics profits rose significantly for 4th quarter and 12 months ended Jan. 31 on higher revenues from shift toward higher-margin "upscale" segment of consumer electronics and sharp reductions in PC inventories. Income for quarter jumped to $3.81 million (45 cents per share) from year-earlier $996,000 (12 cents) on 9% sales increase to $115.95 million from $106.86 million. For 12 months, profit grew to $2.91 million (35 cents) from $148,000 (2 cents) on 10% sales increase to $337.45 million from $306.31 million. Pres.-COO David Workman said company is "excited about the ongoing sales momentum" driven by new digital products, including double-digit growth in DVD. ------ DVD rentals overseas are picking up momentum. Sony's

Columbia-TriStar in Euro●now offers retail package that●ndles 16 titles
and point-of-sale materials for $300 -- under $19 per disc. Studio also is
running consumer "Rent and Win" promotion through Dec. to boost rentals,
with more than 30 titles monthly tagged with phone number for customers to
enter drawing for Sony DVD player. Besides awarding deck to 2 viewers
monthly, retailers that rented DVDs to winners also get Sony player. Pool
of DVD titles for rental in Europe is expected to deepen later this year,
Columbia TriStar said, when it assumes distribution of Univeral's discs
outside U.S. Proliferation of DVD rentals in Region 2 Europe as well as
more day-and-date **releases** with VHS there is hoped to stem trade in
Region 1 U.S. discs played on modified decks. But recent catalog from U.K.
mail order house McNo offered long list of Region 1 and multiregion titles.
Catalog took over CD-I distribution from Philips when latter dropped
software for interactive format. In Japan, meanwhile, top video rental
chain Culture Convenience club has expanded DVD rentals to 800 of its 950
outlets, from pilot test begun in 2 Tokyo stores in Dec. 1997. Retailer
said rentals doubled to 1,200 in Dec. in pilot stores from year ago.
However, spokesman said DVD player rentals have declined, indicating
increase in installed base. DVD rental titles in Japan are available from
Pioneer, Sony Pictures, Warner. ------ Digital music videos will join music
offerings from DMX when supplier of in-store entertainment announces
transition to Internet transmission of content later this month. DMX
spokesman told us company will announce electronic delivery plans in
conjunction with IBM and content partners at GlobalShop trade show
(Chicago, March 27-29). DMX now **transmits** music programs by cable and
satellite. Besides on-premises music for retailers, DMX offers music
channels consumers through services such as DirecTV. Spokesman said company
will offer Internet delivery to homes over long term. ------ Video delivery
by high-speed phone lines has attracted first investment from new $50
million Matsushita fund established to nurture high-tech start ups.
Japanese CE giant will bankroll work in progress by Sunnyvale, Cal.-based
Epigram on video and data over conventional phone lines. ------ JVC will
halt movie-acquisition and sales activities of its Cal.-based Largo
Entertainment subsidiary. Now, Largo will administer revenues and rights to
only about 30 movies it still owns. JVC set up Largo in 1989 in attempt to
produce movies -- partly to feed titles for fledgling prerecorded S-VHS
market. Effort didn't succeed and in 1994 Largo switched to rights
acquisitions and sales. ------ Online links for "hidden content" or
value-added features are used in DVD-ROM game for PC and new "enhanced" CD.
E-CD from U.K.'s Abbey Road Interactive has "hidden" song track, but
listener needn't be online to hear cut. Instead, disc user registers with
online site and gets personal password that enables song to be played
offline on specific PC used to register. Studio said benefit is that
consumer isn't dependent on getting Internet connection each time CD is
played. Separately, videogame developer Psygnosis said it will demonstrate
its first DVD-ROM- based game for PCs at Game Developers Conference (San
Jose, March 15-18). Title is Lander, sci-fi game slated to ship late March,
that permits 8-user multiplay over local network or on Internet. ------
After laserdisc sale to public at its warehouse, Pioneer Entertainment has
held its first direct-to-consumer laserdisc sale via mail order. Company
offered discs at $10 each for 1-10, $8 each for 11-20, $6 each for 21 or
more discs, with postmarked orders due by March 9. But Pioneer isn't yet
getting out of laserdisc software business, Sales & Mktg. Mgr. Ann Mosher
said. Company gave deadline for orders "because we wanted sales in by the
end of March, for the end of our fiscal year," she said. It has "no plans
to stop" selling laserdiscs yet, Mosher said, and will continue to sell to
consumers over its Web site. Company has multiyear agreements with
Paramount and Universal and will continue to maintain its catalog, she
said. More than 2,000 people attended warehouse sale in Carson, Cal., last
weekend in Feb., she said, when Pioneer offered 1,400 titles priced at $4
and up: "There are still a lot of enthusiastic laserdisc customers out
there." ------ VHS Videotape Coalition is latest group formed by
International Recording Media Assn. (IRMA) Coalition Initiative. Group was
scheduled to be launched officially at IRMA Executive Forum last week and
is addition to Audiocassette Coalition and Optical Media Antipiracy
Coalition Co-chairing new group are Stan Bauer, Fuji vp-gen. mgr. Magnetic
Markets, Larry Bennett, Premiere Video pres.-CEO; Paul Scott, Technicolor

senior vp-video sales. N coalition "reflects the fact t this
entertainment format still represents the largest share of the entire
recording media industry and continues to flourish," IRMA Exec. Vp Charles
Van Horn said. ------ Consumer encoders for Dolby Digital surround sound
system have been developed separately by Matsushita and Pioneer. Technology
will enable upcoming home recorders using DVD, PC hard disc or other media
to record audio in multichannel digital format from broadcast or online
sources, companies said. Each said its processor complies with Dolby
Digital Consumer Encoder (DDCE) standard, meaning that incoming audio is
compressed to 1/3-1/10 of original **data** to produce bitstream that can be
decoded by **current** Dolby Digital circuits in DVD players, home theater
receivers and processors, as well as digital TVs using U.S.- developed ATSC
standard. Dolby Digital also is surround-sound format adopted by U.S.-based
satellite TV programmers and most theatrical productions. Matsushita said
its single-chip encoder will be available in sample quantities by year-end
at about $56. Pioneer didn't announce delivery or pricing. Compared with
professional Dolby Digital encoders, consumer **versions** need less
processing power and voltage. ------ First 4" VGA-format LCD using
low-temperature polysilicon TFT was announced for immediate sale by Toshiba
last week. Lightweight, high-brightness, low-voltage panel has 640x480
pixels resolution, Toshiba said. Compared with amorphous silicon used in
conventional TFT-LCDs, crystallized silicon (polysilicon) permits faster
flow of electrons between transistors. Design reduces components needed in
display 40%, resulting in smaller size, greater reliability, higher
resolution. Those improvements and lower power consumption are deemed
essential for next-generation **mobile** electronics **devices** . New panel
displays 256,000 colors, has 250:1 contrast ratio, 0.126 mm pixel pitch, 40
millisec. response time. It consumes 350 mW and weighs one oz. Sample price
is $435. Toshiba previously announced 8.4" and 10.4" low temperature
polysilicon screens for use in portable PCs.

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25/5,K/12   (Item 2 f█████ file: 636)
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04016564   Supplier Number: 53222519   (THIS IS THE FULLTEXT)
-MICROSOFT: Gates delivers COMDEX keynote.
M2 Presswire, pNA
Nov 16, 1998
Language: English   Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 909
TEXT:
M2 PRESSWIRE-16 November 1998-MICROSOFT: Gates delivers COMDEX keynote
(C)1994-98 M2 COMMUNICATIONS LTD RDATE:151198 -- Speaks of the promise and
pitfalls of the information age In an optimistic and forward-looking
keynote address at COMDEX/Fall '98, Microsoft Corp. Chairman and CEO Bill
Gates today spoke of how innovation in PC technology will continue to
improve people's lives in **numerous** new ways. But he cautioned that the
industry must tackle two key issues - increased complexity and threats to
privacy - if it is to build on its remarkable success. Gates spoke of the
great potential of the **many** new products enabled by the PC, such as
eBooks (electronic books). Gates also unveiled Microsoft's innovative and
pioneering new ClearType font technology, which will make eBooks and the
LCD screens found on laptops and other computers almost as clear and easy
to read as the printed page. "The ClearType software offers a breakthrough
in screen readability that wasn't expected for another five years," said
Gates. Gates predicted that, with broad support from eBook manufacturers
and the world's largest publishers, the fledgling eBook industry will take
off far more rapidly than anyone has previously forecast. "The shape of
books as we know them is changing," Gates said. "By 2001, 50,000 electronic
titles will be available, and millions of people will be reading books in
electronic form. Each eBook will have the capacity to **store** literally
tens of thousands of titles - as **many** as you find in some bookstores
today." These personal libraries, he said, will make reading easier and
more convenient, while helping to **preserve** the environment by **saving**
millions of trees. The proliferation of what he called "personal
companions," eBooks and other **portable** interactive **devices** based on
open PC and Internet standards, is making the dream of information
everywhere a reality, Gates said. Such innovations offer enormous benefits
to consumers and business computer users who increasingly need access to
data wherever they are, while offering the entire PC industry vast
potential for growth. But, Gates cautioned, the increasing number of
devices and media on which data is stored could soon swamp customers unless
the industry puts simplicity first. At Microsoft, Gates emphasized,
conquering complexity is the No. 1 priority. Demonstrating Microsoft's
efforts to combat complexity, Gates showed how Microsoft Office 2000 will
tailor itself to the individual user for increased ease and productivity,
and how the software can repair itself if files are accidentally deleted.
Gates also demonstrated how Microsoft SQL Server 7.0 enables developers to
build databases that can be searched using simple questions in English.
Such innovations, Gates said, will help Microsoft's customers cut through
the complexity of computing. "Rather than making customers learn and adapt
to our software, we are designing software that learns and adapts to our
customers," he said. But simplicity alone is not enough, Gates said. He
cautioned that the industry should heed consumers' fears about the security
of all the devices and media - especially the Internet - on which their
personal **data** is stored. While noting that this is nothing **new** - paper
records of personal **data** have proliferated uncontrollably since the
introduction of the bank account - Gates acknowledged the fear of **many**
consumers that, in an online world, their personal data is more easily
accessible and insecure than ever. "We in the industry must meet our
responsibilities in this area. As we provide people with the tools to go
online, we must protect their privacy every step of the way," Gates said.
He discussed the industry initiatives that are already in place, from the
Online Privacy Alliance to TRUSTe, and described Microsoft's own efforts to
assure privacy, from providing privacy statements on all Microsoft Web
sites to designing the tools and business practices to lead the industry's

privacy crusade. Gates' ⬤ech was introduced by a humoro⬤ideo of his
past year's "highlights" – getting a pie in the face in Brussels,
participating in the Senate hearing, being sued by the government,
"appearing" on MTV's Celebrity Death Match, and watching while Windows 98
crashed at COMDEX/Spring – and ended on an upbeat note. The PC, he said, is
not only making amazing gains in enterprisewide systems, as evidenced by
the fact that corporations are adopting the Microsoft Windows NT operating
system **version** 4.0 at a faster rate than any other mission-critical
operating system, it is also making possible dozens of new leisure-time
activities, from reading eBooks to practicing digital photography to
competing in virtual motocross. Thanks to this innovation, Gates concluded,
the PC industry is on the brink of the strongest period of growth it has
ever seen. "Ninety percent of the innovations this industry has to offer
its customers are yet to come," Gates said. "So to those who think PC
technology has run its course, I have a simple message: You ain't seen
nothin' yet." Founded in 1975, Microsoft (Nasdaq "MSFT") is the worldwide
leader in software for personal computers. The company offers a wide range
of products and services for business and personal use, each designed with
the mission to make it easier and more enjoyable for people to take
advantage of the full power of personal computing every day. Microsoft,
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   (USE FORMAT 7 FOR FULLTEXT)
TEXT:
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03914059   Supplier Number: 50125679   (THIS IS THE FULLTEXT)
-PUMA TECHNOLOGY: Intellisync for notebooks launches
M2 Presswire, pN/A
July 6, 1998
Language: English   Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 1113
TEXT:
M2 PRESSWIRE-6 July 1998-PUMA TECHNOLOGY: Intellisync for notebooks
launches (C)1994-98 M2 COMMUNICATIONS LTD RDATE:060798 **New** Generation
Software Enables **File** Transfer and Direct Synchronisation Of PIM, Contact
and Scheduling Applications between PCs & Notebooks Roderick Manhattan, a
division of the PlanIT Group, and the UK's leading independent republisher
today announced an innovative solution that synchronises all of a mobile
professional's key PC-based data. IntelliSync for Notebooks, developed by
Puma Technology Inc. (NASDAQ:PUMA), the leader in Mobile **Data** Exchange
software, is a **new** generation personal **information** management (PIM) and
 file transfer/synchronisation software solution for PC-to-Notebook
connectivity. A native Windows 95 application, IntelliSync for Notebooks
advances the state of "content-aware" data synchronisation by offering
direct PIM-to-PIM advanced synchronisation between notebook and desktop PCs
even if the PIMs on the two devices are not the same. Additionally,
IntelliSync for Notebooks provides a comprehensive suite of PC-to-Notebook
file transfer and file synchronisation features to satisfy even the most
demanding file maintenance tasks. IntelliSync for Notebooks is unique in
its ability to provide both file transfer/synchronisation and PIM
synchronisation in a single PC-to-Notebook connectivity product. Advanced
PIM-To-PIM Synchronisation IntelliSync for Notebooks' unique PIM
synchronisation capabilities are well suited to a wide variety of user
environments. It is an ideal solution for individuals or workgroups whose
companies have standardised on particular PIM or scheduling applications
for corporate use, but who prefer to use a different application that is
better suited to their particular needs on their own notebooks. Now, with
IntelliSync for Notebooks' record and field-level synchronisation, all of a
user's contact, "to do" and calendar information from the corporate PIM
application can be smoothly, accurately and seamlessly synchronised to the
PIM of the individual or workgroup. IntelliSync for Notebooks' PIM
synchronisation is ideal for mobile professional. While **many** PIM
applications offer a method of synchronising the network server-based data
with that of the client's desktop PC, virtually none offer IntelliSync for
Notebooks' convenience of synchronising the PIM data directly between the
desktop and notebook in a true peer-to-peer environment. Previously users
would have either limited or no convenient method of updating the
information stored in their notebook PC-based PIM with that of the PIM on
their desktop. IntelliSync for Notebooks supports a wide variety of PIMs
including Outlook 97, Lotus Organizer 97, Microsoft Schedule+ 7.0/7.0a/7.5,
Lotus Organizer 2.1, GoldMine 3.2, Symantec ACT! 3.0.6, and DayTimer
Organizer 2.0/2.1 to name a few. "PC-to-Notebook synchronisation between
various PIMs running on different devices is the next logical step in the
evolution of synchronisation," said Steve Russell, RMG's director of
marketing & business development. "This makes it easier for mobile
professionals to **keep** critical contact **information** **updated** and
synchronised on a regular basis." Intellisync For Notebooks As A New
Generation Solution For Mobile Professionals IntelliSync for Notebooks is
the more powerful successor to Puma's widely adopted TranXit line of
wireless infrared (IR) connectivity software which enables both **mobile**
and desktop **computer** users to seamlessly and wirelessly synchronise,
print and transfer files across diverse operating systems and hardware
platforms in real time. IntelliSync for Notebooks is a new generation

solution for advanced synchronisation following on the heels of TranXit,
but taking the core synchronisation technology to new heights. IntelliSync
for Notebooks further increases user productivity through simplifying daily
activities for **mobile computer** users via **many** new synchronisation
enhancements. Supporting both wireless infrared (IR) and cable connections
(serial and parallel), IntelliSync for Notebooks is compatible with all
versions of TranXit for file-transfer and file synchronisation, giving
IntelliSync for Notebooks users convenient connectivity with the millions
of Puma TranXit users worldwide. File Transfer and Synchronisation In
addition to its powerful synchronisation capabilities, IntelliSync for
Notebooks also offers a full complement of PC-to-Notebook file transfer and
file maintenance features using the familiar Windows 95 Explorer look and
feel. IntelliSync for Notebooks provides copy, move, delete and create
functions for both files and directories on a local or remote PC.
IntelliSync for Notebooks also supports inbox/outbox file transfer for
added security as well as "named" and "Express" outboxes for deferred file
transfer. "It is cumbersome and extremely time consuming for people on the
move to constantly have to manually update their desktop or network-based
PIM with that of their notebook PC or vice-versa, in an effort to **keep**
both databases in sync, adds Russell. "Intellisync for Notebooks provides
notebook and desktop PC users with a quick and easy method of
synchronisation." Ease-Of-Use After an easy set-up process, users simply
choose the files and/or PIMs they wish to synchronise and IntelliSync for
Notebooks completes the process quickly and accurately ensuring that the
correct **data** is **updated** and stored according to user preference.
IntelliSync for Notebooks also gives the user significant flexibility in
customisation and set-up. For example, users can specify which desktop PC
application is to be synchronised with a notebook PC application, even
specifying the individual field mappings between the applications, what
date ranges of a schedule are to be synchronised, and whether all or only
pending action items are to be synchronised. Users can also synchronise
files on two computers with a click of the mouse and can even create jobs
that automatically synchronise both files and PIMs on two different
systems. Puma Technology Puma Technology, Inc.(NASDAQ:PUMA) is the leading
provider of Mobile Data Exchange software, high-performance wireless
infrared connectivity solutions that allow users to easily exchange or
access information and applications from a remote **computer** over both
wireless and wired media, and content aware data synchronisation software
for PCs and hand held devices. Roderick Manhattan Roderick Manhattan is the
UK's leading independent republisher and a division of the PlanIT Group.
RMG boasts an incredible range of multi-award winning, best-selling
business and utilities software. Established for over 12 years in the UK
software industry, RMG has built an enviable reputation for consistently
topping the retail sales charts with brand leaders. Pricing, Availability &
Contact Information IntelliSync for Notebooks has an RRP of 39.99 inc. VAT.
Products are distributed in the U.K. through Gem Distribution, Ingram Micro
and Centresoft and are sold by all the major retail stores nationwide,
including PC World, and Staples, as well as large resellers such as
Software Warehouse and Action Computer Supplies. CONTACT: Jacki
Vause/Louise Tarpey, Flapjack Communications Tel: +44 (0)171 224 4554 Fax:
+44 (0)171 935 4052 e-mail: info@flapjack.com WWW: http://www.flapjack.com
Steve Russell, Roderick Manhattan Tel: +44 (0)181 875 4400 Fax: +44 (0)181
875 4401 e-mail: stever@rmg.co.uk WWW: http://www.rmg.com *M2
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PUBLISHER NAME: M2 Communications
INDUSTRY NAMES: BUSN (Any type of business); INTL (Business,
   International)

   (USE FORMAT 7 FOR FULLTEXT)
TEXT:
...6 July 1998-PUMA TECHNOLOGY: Intellisync for notebooks launches
(C)1994-98 M2 COMMUNICATIONS LTD RDATE:060798 **New** Generation Software
Enables **File** Transfer and Direct Synchronisation Of PIM, Contact and
Scheduling Applications between PCs & Notebooks Roderick Manhattan, a

division...

...PC-based data. IntelliSync for Notebooks, developed by Puma Technology
Inc. (NASDAQ:PUMA), the leader in Mobile **Data** Exchange software, is a
new generation personal **information** management (PIM) and **file**
transfer/synchronisation software solution for PC-to-Notebook connectivity.
A native Windows 95 application, IntelliSync for Notebooks...

...PIM of the individual or workgroup. IntelliSync for Notebooks' PIM
synchronisation is ideal for mobile professional. While **many** PIM
applications offer a method of synchronising the network server-based data
with that of the client...

...Steve Russell, RMG's director of marketing & business development. "This
makes it easier for mobile professionals to **keep** critical contact
information **updated** and synchronised on a regular basis." Intellisync
For Notebooks As A New Generation Solution For Mobile Professionals...

...successor to Puma's widely adopted TranXit line of wireless infrared
(IR) connectivity software which enables both **mobile** and desktop
computer users to seamlessly and wirelessly synchronise, print and
transfer files across diverse operating systems and hardware platforms...

...synchronisation technology to new heights. IntelliSync for Notebooks
further increases user productivity through simplifying daily activities
for **mobile** **computer** users via **many** new synchronisation enhancements.
Supporting both wireless infrared (IR) and cable connections (serial and
parallel), IntelliSync for Notebooks is compatible with all **versions** of
TranXit for file-transfer and file synchronisation, giving IntelliSync for
Notebooks users convenient connectivity with the...

...or network-based PIM with that of their notebook PC or vice-versa, in an
effort to **keep** both databases in sync, adds Russell. "Intellisync for
Notebooks provides notebook and desktop PC users with a...

...wish to synchronise and IntelliSync for Notebooks completes the process
quickly and accurately ensuring that the correct **data** is **updated** and
stored according to user preference. IntelliSync for Notebooks also gives
the user significant flexibility in customisation...

...infrared connectivity solutions that allow users to easily exchange or
access information and applications from a remote **computer** over both
wireless and wired media, and content aware data synchronisation software
for PCs and hand held devices. Roderick Manhattan...uk WWW:
http://www.rmg.com *M2 COMMUNICATIONS DISCLAIMS ALL LIABILITY FOR
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DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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02510787   Supplier Number: 45048404   (THIS IS THE FULLTEXT)
**NEW IBM THINKPADS PACK POWERFUL MULTIMEDIA AND GLOBAL COMMUNICATIONS INTO A
   MOBILE COMPUTER**
M2 Presswire, pN/A
Oct 7, 1994
Language: English   Record Type: Fulltext
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M2 PRESSWIRE-7 November 1994-NEW IBM THINKPADS PACK POWERFUL MULTIMEDIA AND
GLOBAL COMMUNICATIONS INTO A **MOBILE** **COMPUTER** (C)1994 M2 COMMUNICATIONS
LTD RDATE: 171094 Built-in CD-ROM and telephone Putting more flexibility
and choice into the hands and briefcases of **mobile** **computer** users, IBM
Corporation today announced new models of IBM ThinkPad* systems, the

industry's most highly a⬤imed notebook computers. With⬤precedented
built-in features and an easy-to-use, sleek design, the new IBM ThinkPads
are powerful entertainment, presentation, and worldwide communications
tools packaged ready to use. Additions to the IBM ThinkPad 755, 360 and 340
series include enhancements to the ThinkPad 755 series (755CE and 755CD)
and to the ThinkPad 360 series (36DCSE and 360CE). All new models are
backed by IBM's outstanding service and support, sporting technical support
through IBM Helpware* and up to a three year international warranty
service. "The IBM ThinkPad has leadership technology, impeccable quality
and award- winning design which makes it the most desirable **mobile
computer** on the market," said Gary Milner, marketing Manager of mobile
computing. "Today's announcement clearly reaffirms ThinkPad's reputation as
the **mobile computer** that everyone would want to own. Our emphasis is on
higher performance, advanced function and solutions". The ThinkPad 755CD is
a unique, innovative mobile multimedia solution with a built-in, full-sized
CD-ROM, stereo speakers, enhanced video and television integration features
and a game port, all at a light 7.3 pounds. In addition, one of the most
value-priced, premium-designed notebooks in the industry, the IBM ThinkPad
360 Series, just became even better value. The two new colour models,
ThinkPad 360CE and 360CSE, feature a faster 486DX2 50 MHz processor,
standard hard drives of 170, 340, 540 and 810 millionbytes (MB), and an
integrated math co-processor that makes intensive spreadsheet of
computer-aided design applications a lot faster. A complete solution With
exclusive IBM technology, the ThinkPad 755 Series is clearly a top of the
line premium notebook. Unlike **many** other notebooks available today, both
the ThinkPad 755CE and 755CD are packed with important features, such as: *
a fully-functional and expandable Mwave* Digital Signal Processor (DSP),
which provides built-in, high-speed data/fax modem (subject to country-PTT
approval), telephony including answering machine, speakerphone and
message/document **storing** functions, as well as advanced audio to support
a wide range of game and business software; * the latest glare resistant
10.4 inch (measured diagonally) IBM Black-matrix-on-Array colour screen,
with up to 65,536 simultaneous colours, and better viewability indoors and
outdoors; * a built in, high speed infrared file transfer capability
Connectus* technology, allowing connection to other **portable devices** .
This technology is compliant with the latest IRDA (Infrared Data
Association) standards, whilst offering a ten times enhancement in **data**
transfer. * an **upgrade** of IBM's acclaimed keyboard-based,
pressure-sensitive pointing device, the TrackPoint III* -- now with a
non-slip, textured cap for better pointing and cursor control, and advanced
software for more accurate pointing movements -- coupled with click buttons
enhanced with the addition of "drag and drop" capability; * an impressive
combination of power, speed and storage with an extremely fast Intel 486DX4
100 MHz processor, and 8 MB of randam access memory (ROM), expandable to 40
MB. * IBM Redisafe*, a new power managment mode which provides assurance
against loss of data due to power failure. * IBM UltraBay*, an enhancement
to the ThinkPad modular floppy disk drive bay, featuring an intelligent bus
that automatically configures itself to accept options such as PCMCIA
cartridge. Multiultimedia Ready The IBM ThinkPad 755CD integrates powerful
multimedia tools in a premium notebook, elimina ting the need for
multimedia customers to carry separate CD-ROM drives, docking stations, or
additional projection devices. This system simplifies mobile multimedia
applications such as using a ThinkPad to sell a new movie or television
production idea, train a mobile sales force or remote personnel or **store**
the company technical service Manuals. A removeable, double-speed 5.25-inch
CD-ROM drive allows customers to install and run all the latest multimedia
titles. ThinkPad 755CD is compliant with the MPC2 multimedia standard, and
comes preloaded with a selection of multimedia entertainment, office
automation and graphics titles. A mini port allows for connection to a
joystick or MIDI device for using electronic instruments, such as an
electric guitar, to compose music. The ThinkPad 755CD can connect to a
television set (PAL/NTSC compatible), providing customers with the
flexibility of choosing from a selection of projection devices. The system
easily captures still or motion pictures from a VCR or video camera for
playback. Special enhanced-motion video acceleration applies high
resolution picture smoothing techniques to improve Image quality when quick
changes are made in picture size. All of this is topped off with 16-bit

audio and two built-in stereo speakers, an improved :integrated microphone,
and an easily accessible manual speaker volume control. The ThinkPad 755CD
has enough storage for multimeda applications with a standard 540 or 810 MB
drive. The ThinkPad 755CE features a 340, 540 or 810 MB hard drive.
Solutions ALL new Thinkpad models come fully loaded with a wide variety of
software titles, including Lotus Screencam, an ideal tool for creating
multimedia training applications for remote workers, Lotus Organiser, Lotus
ccMail Mobile, Asymetrix Personal **Edition** , Asymetrix Digital Video
Producer (755CD only), AudioFile TalkEorks, Triton CoSession Host, Puma
Tranxit OAG Flightdisk and Video for Windows (runtime). These applications
provide time management, personal planning information (flight schedules),
personal presentation capability, Voice messaging software, Infrared
control, remote communications support and video capture and edit
facilities. The range of applications available on these ThinkPads are
unrivalled, "No other notebook offers the performance and range of
solutions that the new 755 models offer", said Gary Milner, EMEA marketing
manager of mobile computing. Docking and Desktop Replacement All of the
ThinkPad 360 and 755 models support four IBM docking solutions providing
the user with a range of choices that replace the desktop unit. The four
docking solutions include: the portable Dock I with an internal slot and
bay, Dock II with **multiple** slots/bays/PCMCIA capability and two port
replicators, with or without PCMCIA slots. The new ThinkPad 755CE and 755CD
support the ability to dock with the ThinkPad Dock II, allowing the user to
dock or undock whilst the system is suspended, without the need for
reconfiguring the machine. However, even without docking stations, the new
ThinkPads are easily used as a primary computer system. Plug and Play Ease
Achieving Plug and Play simplicity is easy when using the Thinkpad system's
Personal Computer Memory card inter -national Association (PCMCIA) slots.
All ThinkPads are preloaded with the IBM PC Card Director* utility, which
automtically configures **many** PCMCIA cards and automates the launches of
applications. PC Card Director also gives the customer the added benefit of
visible and audible confirmation when a card has been inserted or removed.
Every ThinkPad has the added expansion and growth flexibility of
industry-standard PCMCIA slots. IBM ThinkPad 360 and 755 Series are
configured with a Type III slot, capable of hawing one Type III or two Type
I or II cards. In addition, users of the new ThinkPad 755 models can
increase the number of available PCMCIA slots with a new option, the
ThinkPad PCMCIA Cartridge, like previous ThinkPad add-in modules, the
PCMCIA Cartridge is inserted by lifting the "pop-up" keyboard and swapping
the new option for the removable floppy drive. Outstanding Mobile Service
and Support The new Thinkpad 755 models come with a three-year
international limited warranty service, honoured wherever IBM or IBM
remarketers sell and/or service IBM PC products, currently in more than 120
countries around the globe. Also available to ThinkPad customers is IBM
HelpWare, the most comprehensive service and support infrastructure in the
industry. Headquartered in Armonk, N.Y., IBM is one of the industry's
leading vendors of personal computers. IBM introduced the first PC to use
the x86 architecture in August 1981 and helped to spawn the @ti-billion
dollar personal computer industry. Today, the company develops,
manufactures, markets and distributes a variety of PCs -- from subnotebooks
to high-end servers -- as well as a line of monitors, peripherals and
accessories, in more than 140 countries worldwide. * Trademark or
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CoSession is a trademark of Triton Technologies Inc. * OAG and Flightdisk
are trademarks of official Airline Guide Company. * Lotus is a registered
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TEXT:

M2 PRESSWIRE-7 November ⬤-NEW IBM THINKPADS PACK POWER⬤MULTIMEDIA AND
GLOBAL COMMUNICATIONS INTO A **MOBILE** **COMPUTER** (C)1994 M2 COMMUNICATIONS
LTD RDATE: 171094 Built-in CD-ROM and telephone Putting more flexibility
and choice into the hands and briefcases of **mobile** **computer** users, IBM
Corporation today announced new models of IBM ThinkPad* systems, the
industry's most highly acclaimed...

...IBM ThinkPad has leadership technology, impeccable quality and award-
winning design which makes it the most desirable **mobile** **computer** on the
market," said Gary Milner, marketing Manager of mobile computing. "Today's
announcement clearly reaffirms ThinkPad's reputation as the **mobile**
computer that everyone would want to own. Our emphasis is on higher
performance, advanced function and solutions". The...

...exclusive IBM technology, the ThinkPad 755 Series is clearly a top of
the line premium notebook. Unlike **many** other notebooks available today,
both the ThinkPad 755CE and 755CD are packed with important features, such
as...

...speed data/fax modem (subject to country-PTT approval), telephony
including answering machine, speakerphone and message/document **storing**
functions, as well as advanced audio to support a wide range of game and
business software; * the...

...and outdoors; * a built in, high speed infrared file transfer capability
Connectus* technology, allowing connection to other **portable** **devices** .
This technology is compliant with the latest IRDA (Infrared Data
Association) standards, whilst offering a ten times enhancement in **data**
transfer. * an **upgrade** of IBM's acclaimed keyboard-based,
pressure-sensitive pointing device, the TrackPoint III* -- now with a non
...

...sell a new movie or television production idea, train a mobile sales
force or remote personnel or **store** the company technical service Manuals.
A removeable, double-speed 5.25-inch CD-ROM drive allows customers...

...ideal tool for creating multimedia training applications for remote
workers, Lotus Organiser, Lotus ccMail Mobile, Asymetrix Personal **Edition**
, Asymetrix Digital Video Producer (755CD only), AudioFile TalkEorks,
Triton CoSession Host, Puma Tranxit OAG Flightdisk and Video include: the
portable Dock I with an internal slot and bay, Dock II with **multiple**
slots/bays/PCMCIA capability and two port replicators, with or without
PCMCIA slots. The new ThinkPad 755CE...

...Association (PCMCIA) slots. All ThinkPads are preloaded with the IBM PC
Card Director* utility, which automtically configures **many** PCMCIA cards
and automates the launches of applications. PC Card Director also gives the
customer the added...
...Alder Tel: +44 705 563069 M2 COMMUNICATIONS LTD DISCLAIMS ALL LIABILITY
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07299868   Supplier Number: 61866851 (USE FORMAT 7 FOR FULLTEXT)
**NO strings attached;Wireless e-commerce promises to free sales people,
  empower field techs and delight customers.(Brief Article)**
NELSON, KRISTI
B to B, v85, p13
April 24, 2000
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Article Type: Brief Article
Document Type: Magazine/Journal
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ADVERTISING CODES: 85 Industry Market Data

    (USE FORMAT 7 FOR FULLTEXT)
TEXT:
...information. As hardware, software and service vendors team up to
leverage the technology, the opportunities appear limitless. **Wireless
devices** like the Palm VII wireless hand-held and a wide array of
Internet-enabled cellular phones are...

...built around taking the applications that already reside in the
corporation today and extending those onto a **wireless device** ." Indeed,
wireless applications have already taken hold in industries such as
transportation and shipping, where **many** field sales forces have been
equipped as wire line connections aren't an option. Field service
organizations...

...going to become pretty efficient." Until recently, such wireless
applications have required highly customized solutions. However, as
communication costs continue to decline and new **wireless devices** are
developed, software vendors are working to develop more mainstream
solutions for businesses. For example, Siebel Systems...

...to time-critical customer data from their mobile phones and other
wireless Internet handsets. Expected to be **released** this spring, Siebel
Wireless will integrate with Siebel's current customer relationship
management vertical solutions. It will...

...analyst at Aberdeen Group's CRM practice. Emerging wireless markets
Wireless applications ultimately will allow companies to **communicate** with
customers through handheld **devices** to **target** personalized promotions,
provide access to customer service **information** , automatically alert
customers to **new** products, and even test pricing strategies. "There's an
abundance of new uses that we'll probably...

...The companies will develop strategies and creative approaches for the
delivery of advertising to FusionOne subscribers on **wireless devices** ,
such as smart phones and personal digital assistants. Another emerging area
of development will be in partnership relationship management, according to
Smith. " **Many** vendors are talking about mobile PRM -- which is providing
suppliers, partners and the whole channel with information...

...forces to help meet the growing demand for e-businesses worldwide to
link data and applications to **wireless devices** . The companies will
jointly develop a "voice and data engine," which will offer businesses an
easy way...